# **CHAPTER 24.12**

# LINCOLN PLUMBING CODE

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# 24.12.005 Adoption of 2000 Uniform Plumbing Code.

Except as hereinafter provided by specific amendment, the Uniform Plumbing Code, 2000 Edition, including Appendix: A, B, D, I, and L, sponsored by ASSE, NAPHCC, MCAA, UA and WFCA, is hereby adopted and incorporated into Title 24 of the Lincoln Municipal Code. The presence of these logos, while reflecting support, does not imply any ownership of the copyright to the UPC which is held exclusively by IAPMO. The ASSE "service mark and logo" on the cover of this document indicates ASSE's support of the voluntary, open consensus process being used by IAPMO and NFPA to develop their codes and standards. Three copies of this document shall be filed in the office of the Director of Building and Safety of the City of Lincoln for the use of and examination by the public. The City Clerk shall maintain one copy of this document in book form with the official records of the City. (Ord. 18239 §1; September 15, 2003).

# 24.12.010 Section 101.0 Amended; Title, Purpose and Scope.

Section 101.0 of the Uniform Plumbing Code is amended to read as follows:

- **101.1 Title.** This ordinance shall be known as the "Lincoln Plumbing Code," and may be cited as such and will be referred to herein as "this code."
- **101.2 Purpose.** The purpose of this code is to provide minimum standards to safeguard individual life, limb, health, and property, and the public health, safety and welfare by regulating and controlling the design, quality of material, and installation, alteration, and repair of all plumbing and drainage systems within the corporate limits of the City of Lincoln and within three miles thereof and outside the limits of any other incorporated city or village.
- **101.3 Scope.** The provisions of this code shall apply to the installation, alteration, or repair of all plumbing and drainage systems including the practice, materials, and fixtures used in the installation and appurtenances thereto, except mains and septic systems, within the corporate limits of the City of Lincoln and within three miles thereof and outside the limits of any other incorporated city or village. Where, in any specific case, different sections of this code specify different materials, methods of installation or other requirements, the most restrictive shall govern.
- **101.3.1 Appendices.** The provisions in the appendices are intended to supplement the requirements of this Code and shall not be considered part of this Code unless formally adopted.

- **101.4 Alternate Materials or Methods of Installation.** The provisions of this code are not intended to prevent the use of any material or method of installation prescribed by this code, provided any such alternate has been approved by the Administrative Authority. The Administrative Authority may approve any such alternate, provided the authority finds that the proposed design is satisfactory and complies with the provisions of this code, and that the material, method, or work offered is, for the purpose intended, at least the equivalent of that prescribed in this code in quality, strength, effectiveness, durability, and safety. The Administrative Authority shall require that sufficient evidence or proof be submitted by a qualified testing laboratory to substantiate any claims that may be made regarding its use.
- 101.5 Existing Plumbing. All existing plumbing work coming within the scope of this code shall be subject to inspection by the Administrative Authority at the request of the agent, owner, or occupant of any building or premises where said plumbing work is located in order to ascertain whether or not said plumbing is in a safe and properly operating condition. Whenever defective or improperly operating plumbing is found, the Administrative Authority shall notify the owner of the premises on which same is found or his agent to correct the deficiency in such a manner as the Administrative Authority may authorize and direct. Such owner or agent shall, within ten days after receiving such notification to correct deficiencies, make the necessary corrections, and failure or neglect to do so shall constitute a violation of this ordinance and be subject to prosecution as provided by law. (Ord. 18239 §2; September 15, 2003).

# 24.12.015 Section 102.0 Amended; Organization and Enforcement.

Section 102.0 of the Uniform Plumbing Code is amended to read as follows:

# 102.0 Organization and Enforcement.

- **102.1 Administrative Authority.** The Director of Building and Safety for the City of Lincoln is herein designated as the "Administrative Authority" and he shall be responsible for administration and enforcement of this code. The Administrative Authority may appoint such inspectors and other employees as shall be authorized from time to time. He may deputize and authorize such inspectors or employees as may be necessary to carry out his duties and responsibilities under this code.
- **102.2 Right of Entry.** Whenever it shall be necessary to make an inspection to enforce any of the provisions of this code, or whenever the Administrative Authority or his authorized representative have reasonable cause to believe that there exists in any building upon any premises any plumbing or drainage systems, or portions thereof, that have become hazardous to life, limb, health, or property, or that work is being done or has been done in violation of this code, then the Administrative Authority or his authorized representative may enter such building or premises at all reasonable times to inspect the same or perform any duty imposed upon the Administrative Authority by this code; provided that:
- (1) If such building or premises be occupied, he shall first present proper credentials and request entry; and
- (2) If such building or premises be unoccupied, he shall first make a reasonable effort to locate the owner or other persons having charge or control of the building or premises and request entry. If such entry is refused, the Administrative Authority shall have recourse to every remedy provided by law to secure entry.

#### 102.3 Enforcement.

102.3.1 All plumbing and drainage systems coming within the scope of this code, including all water, sanitary sewer, and storm sewer mains on private property, shall be inspected by the Administrative Authority to assure compliance with all the requirements herein. Mains as herein defined

shall be either water, sanitary sewer, or storm sewer, connecting two or more buildings, structures, or premises under single- or multi-ownership.

102.3.2 Private water mains two inches or larger, private sanitary sewer mains six inches or larger, and private storm sewer mains fifteen inches or larger shall be installed in accordance with the specifications and design standards established by the Administrative Authority. Mains smaller in size than listed above, located on private property, shall be installed in accordance with the Lincoln Plumbing Code, Table 1 and inspected by the Administrative Authority.

# Table 1 Underground PVC Sanitary, Storm Installations Materials Inside & Outside of Buildings

Pipe Size	Туре	Joints
2 in through 6 in	Schedule 40 Schedule 80 ASTM 2241 SDR 26 AWWA C-900 DR-14	Solvent Weld Or Gasket
8 in through 12 in	All the above ASTM -3034 SDR 26	Solvent Weld Or Gasket
15 in or Larger	ASTM - F679 T-1 ASTM 3034 SDR- 35	Solvent Weld Or Gasket

#### Bedding Requirements from invert to top of pipe

Inside of Building structure

All sizes--- 47B gravel or crushed limestone 3/4" crushed run or chips

Exterior of Building structure

2" thru 6" not required

8" and larger 47B gravel or crushed limestone 3/4" crushed run or chips

**102.3.3** Water, sanitary sewer, or storm sewer systems must comply with the requirements of the Lincoln Plumbing Code for individual services as a condition of subdivision approval.

EXCEPTION: Mains installed on public right-of-way or dedicated public easements shall be exempt from the requirements of the Lincoln Plumbing Code, but shall comply with the design standards and specifications as administered by the Public Works and Utilities Department. (Ord. 18239 §3; September 15, 2003).

# 24.12.020 Section 103 Amended; Inspections and Tests.

Section 103.0 of the Uniform Plumbing Code is amended to read as follows:

#### 103.0 Inspections and Tests.

103.1 It shall be the duty of the person installing, altering, or repairing plumbing or drainage systems authorized by a permit under this code to notify the Administrative Authority orally or in writing that said plumbing work is ready for inspection. Such notification shall be given not less than twenty-four hours before the plumbing or drainage work is ready for inspection. It shall be the duty of the permittee doing

the work authorized by a permit to provide reasonable access and means for accomplishing proper inspection. The work to be inspected must properly withstand all tests prescribed and all equipment shall be operational before giving the above notification. If the Administrative Authority shall find that the work will not withstand the prescribed tests or is not operational, the permittee shall be required to renotify the Administrative Authority as provided above and shall be subject to a reinspection fee charge.

- 103.2 No person shall cover or conceal from view any plumbing or drainage work in any building or premises so as to prevent a proper inspection thereof by the Administrative Authority. Whenever any plumbing or drainage work in any building or premises has been covered or concealed before the Administrative Authority has had an opportunity to inspect same, the Administrative Authority shall have authority to order the opening of such cover at the permittee's expense in order to make a proper inspection. No plumbing or drainage system shall be used or the water permanently turned on until such system has been finally inspected and approved by the Administrative Authority.
- 103.3 All rough and finish plumbing shall be tested with air or water as prescribed in this code. When it is necessary to cover a portion of the work before all of the rough plumbing is ready for inspection, the Administrative Authority must be notified and a test made by filling the same with water under a pressure that will be equal to the entire plumbing system when filled to the top of the highest vent pipe. If the groundwork is to be connected to the sewer, there shall be a suitable fitting left in the main soil pipe not more than one foot from where the soil pipe enters the building, so that a testing plug can be inserted. The Administrative Authority, upon approving the rough plumbing or drainage work, shall place thereon a notice stating that the same has been inspected and approved.
- **103.4 Stop Orders.** Whenever any plumbing or drainage system is being installed, altered, or repaired contrary to the provisions of this code, the Administrative Authority shall order the work stopped by notice served on any person or persons engaged in the doing or causing such work to be done, and any such work shall forthwith stop until the administrative authority has authorized the work to proceed again.

The Administrative Authority shall investigate all cases reported or referred to him alleging the use of improper material or workmanship on any work involving installation, alteration, or repair of a plumbing or drainage system by any person and may stop such work in a manner as above described.

- **103.5 Reports and Records.** The Administrative Authority shall keep a complete record of all inspections and tests made pursuant to the provisions of this code. An accurate accounting of fees and other monies collected and received under the provisions of this code shall be deposited with the City Treasurer.
- 103.6 Condemnation Procedures. Whenever defective or improperly operating plumbing equipment or work is found, the Administrative Authority shall condemn such equipment or work by notification to the master plumber contractor, owner of the premises, or agent thereof in writing noting the deficiencies and requiring correction thereof within not less than ten days after receiving such notification. Failure or neglect to correct deficiencies or make necessary corrections within the time designated by the Administrative Authority shall constitute a violation of this ordinance and shall be subject to prosecution as hereinafter provided. (Ord. 18239 §4; September 15, 2003).

# 24.12.025 Section 104.0 Added; Permit Required.

Section 104.0 is added to the Uniform Plumbing Code to read as follows:

# 104.0 Permit Required.

104.1 No person shall install, alter, or repair any plumbing or drainage work or cause the same to be done, without first obtaining a permit therefor from the Administrative Authority as hereinafter required; provided, no permit, license, or registration shall be required for minor repair work. Minor repair work as used in this section is defined as maintenance of the plumbing system, such as the repair of a damaged or leaking trap, water pipe, or drain pipe with approved materials; opening up and cleaning drain pipes; repairing and/or resetting of existing fixtures; or the replacement of faucets, faucet washers, float valves, ball stops, hoses, or sump pumps. The replacement and/or relocation of water pipes, drain pipes, vent pipes, fixtures, or the change in type or kind of fixture shall require a permit.

**104.2** A permit shall be issued only to a properly registered master plumber contractor of the City of Lincoln; provided, a permit may be issued to the owner of a single-family dwelling to do plumbing or drainage work in such dwelling where the same is used exclusively for the purposes of such owner. Such plumbing or drainage work performed by an owner shall be performed by himself without compensation or pay to any other person therefor. Any owner doing plumbing or drainage work hereunder shall apply for the required permit, pay the prescribed fee therefor, call for inspections and do all work in accordance with the provisions of this code.

EXCEPTION: A utility contractor working in the public right-of-way or within dedicated public easements, under the authorization of the Department Public Works and Utilities or the authority of an executive order, shall be allowed to take out plumbing permits. Such permits shall be limited to the reconnection of the portion of existing building sewer services which lie within the public right-of-way or dedicated public easement, and will tap into the new parallel or replacement sewer main. Public Works and Utilities Administration providing inspection on such utility projects shall be responsible to ensure permits are taken out in accordance with the plumbing code, and the records for the new connections and taps, including accurate measurements providing size and location, are forwarded to the Department of Building and Safety in a timely manner.

104.3 Application for Permit. A plumbing permit may be obtained by filing a written application therefor on a form furnished by the Administrative Authority. Such form shall require a description of the character of the work proposed to be done under the permit, the location, ownership, occupancy and use of the premises in connection therewith, and such other information as may reasonably be necessary to carry out the purpose of this code. All applications for a plumbing permit shall be signed by the applicant. The Administrative Authority may further require that two sets of plans and specifications or details be submitted with each application for a permit and that such plans and specifications or details be prepared, designed, and sealed by a licensed engineer or architect of the State of Nebraska. All plans and specifications shall include a schematic riser diagram and shall be of sufficient clarity to indicate the nature and extent of the work proposed, and shall show in detail that such work will conform to the provisions of this code and all relevant laws, ordinances, rules, and regulations.

**104.3.1 Online Permit Application.** A permit may be obtained online through the Administrative Authority's electronic permit application form. The Administrative Authority shall establish and maintain written procedures and requirements for issuing the master plumber contractor a unique personal identification number to be used in combination with an authenticated personal computer under

the exclusive control of the master plumber contractor. The written procedures shall list the acceptable verification or authentication services, payment and use of which shall be the sole responsibility of the master plumber contractor. If a permit is applied for electronically, the applicant shall affix a signature by use of a digital or electronic signature that complies with the requirements of state law. The use of a digital or electronic signature shall have the same force and effect as the use of a manual signature and the master plumber contractor shall be responsible for all aspects of the proper use or misuse of either the electronic signature or the unique personal identification number.

**104.4 Permits.** The application for a plumbing permit together with the plans and specifications filed therewith shall be examined by the Administrative Authority and if he is satisfied that the work proposed conforms to the requirements of this code, he shall issue a permit to the applicant upon payment of the prescribed permit fee. Every permit issued by the Department of Building and Safety shall under these provisions expire by limitation and become null and void if the building or work authorized by such permit is not commenced within 120 days from the date of such permit, or if the building or work authorized by such permit is suspended or abandoned at any time after the work has commenced for a period of 180 days. Upon issuance of the permit, the Administrative Authority shall stamp one set of plans and specifications "approved" such work as approved shall not be changed, modified, or altered without authorization from the Administrative Authority.

**104.5 Fees.** A fee for each plumbing permit shall be paid to the Administrative Authority as follows:

#### SCHEDULE OF FEES<sup>1</sup>

For each roof drain of a rainwater system connected
to an interior rainwater conductor which is connected
to and part of a storm sewer system
For each 100 lineal feet or fraction thereof of
building sanitary sewer
4 inches or less in diameter
Greater than 4 inches in diameter
For each building storm sewer
Reinspection fee (wrong address, plumbing work that does
not pass inspection, work not complete, inaccessibility)
For each industrial waste pretreated interceptor,
including its trap and vent, except kitchen-type grease
interceptors functioning as plumbing fixture traps
For each automobile garage-type mud trap and sand
trap or basin for car wash establishments
For each mobile home unit or trailer unit sanitary
sewer riser connection to the mobile home court or
trailer court sewer system
For each 100 lineal feet or fraction thereof of
private sewer service
Decorative gas log
Each exhauster vacuum pump of an infrared iron pipe
heating system
For each individual mobile home unit or trailer unit
water service riser connection from the mobile home
court or trailer court water distribution system
For each water tap on private water main

For each 100 lineal feet or fraction thereof of
private water service 1 inch or less in diameter
For any storm sewer or sanitary sewer repair work outside of a building
For each fixture or piece of equipment regulated by this code but not listed herein (per unit)
On and after January 1, 2004, the fees for each plumbing permit shall be paid to the Administrative Authority as follows:
Minimum permit fee charge
For each plumbing fixture <sup>2</sup> , or trap, or set of fixtures on one trap, including water, drainage piping and backflow protection therefor
For each water heater replacement and/or vent
For each indirect waste connection <sup>3</sup>
For each domestic water supply connection to any boiler 6.00
For water service for fire suppression system
For change in location of plumbing fixture
For change in location or alteration of any existing water, building sewer, drainage or vent piping, inside a building
For each roof drain of a rainwater system
For each 100 lineal feet or fraction thereof of building sanitary sewer  4 inches or less in diameter
For each building storm sewer

Man Holes
Reinspection fee (wrong address, plumbing work that does not pass inspection, work not complete, inaccessibility)
For each industrial waste pretreated interceptor, including its trap and vent, except kitchen-type grease interceptors functioning as plumbing fixture traps
For each automobile garage-type mud trap and sand trap or basin for car wash establishments
For each mobile home unit or trailer unit sanitary sewer riser connection to the mobile home court or trailer court sewer system
For each 100 lineal feet or fraction thereof of private sewer service
Decorative gas log
Each exhauster vacuum pump of an infrared iron pipe heating system
For each individual mobile home unit or trailer unit water service riser connection from the mobile home court or trailer court water distribution system
For each water tap on private water main
For each 100 lineal feet or fraction thereof of private water service  1 inch or less in diameter
For any storm sewer or sanitary sewer repair work outside of a building
For each fixture or piece of equipment regulated by this code but not listed herein (per unit) 6.00

- <sup>1</sup> (Note: Water softener, lawn sprinkler system, swimming pools, and water-cooled air conditioning permit fees are covered elsewhere in this code.)
- <sup>2</sup> (Note: A plumbing fixture shall be construed as any unit which has waste and/or water connections. A combination shower over a tub shall be construed as one plumbing fixture.)
- <sup>3</sup> (Note: Applies to appliance device or apparatus not classed as a plumbing fixture but which has drip or drainage outlets.)

Where work for which a permit is required by this code is started prior to obtaining the prescribed permit, the fees above specified shall be doubled; provided, in the event of an emergency where it is absolutely necessary to perform the plumbing work immediately before a permit can be secured, such as on nights, weekends, or holidays, said fee shall not be doubled if a permit is secured at the earliest possible time after the emergency plumbing work has been performed. The payment of such double fees shall not relieve any person from fully complying with the requirements of this code or from any penalties prescribed herein. There shall be no refunds or credits given on unused permits which have expired. Permit holders returning an unused permit prior to the expiration date of the permit shall be limited to a maximum refund amounting to two-thirds of the original fee, with the remaining one-third not to exceed \$25.00 to be used to pay in part the cost of processing the permit. (Ord. 18239 §5; September 15, 2003).

# 24.12.030 Section 105.0 Added; Plumbing Board of Appeals.

Section 105.0 is added to the Uniform Plumbing Code to read as follows:

# 105.0 Plumbing Board of Appeals

- 105.1 Creation. In order to review determinations of the Administrative Authority as to the suitability of alternate materials and types of installation and in order to review interpretations of the provisions of this code by the Administrative Authority, there is hereby created and established a Plumbing Code Board of Appeals consisting of five members who shall be qualified by experience and training to pass upon matters pertaining to plumbing and drainage work. Two members shall be master plumber contractors registered with the City of Lincoln. The Administrative Authority shall be ex officio member and shall act as Secretary of this Board. The five members of the Appeals Board shall be appointed by the Mayor and shall hold office at his or her pleasure. The Board may adopt reasonable rules and regulations for the conduct of its investigations and shall render all decisions and findings in writing to the Administrative Authority with a duplicate copy to the person appealing to it.
- **105.2 Filing Fees.** Any person who is aggrieved by any decision of the Administrative Authority relating to the suitability of alternate materials and types of installation and interpretation of any provision of this code may obtain review of such decision upon filing a written request for review by the Plumbing Code Board of Appeals in the office of the Administrative Authority within thirty days from the date of such decision and payment of a filing fee as provided below:
- (1) A twenty dollar fee for review of a decision of the Administrative Authority interpreting any provision or provisions of this code;

(2) A forty dollar fee for review of a decision of the Administrative Authority concerning the suitability of alternate materials or type of installation.

The Administrative Authority may waive the fee for a hearing if it feels there is reasonable cause to do so.

Enforcement of any decision, notice, or order of the Administrative Authority issued under this code shall be stayed during the pendency of an appeal therefrom which is properly and timely filed. (Ord. 18239 §6; September 15, 2003).

# 24.12.035 Section 106.0 Added; Examining Board of Plumbers.

Section 106.0 is added to the Uniform Plumbing Code to read as follows:

# 106.0 Examining Board of Plumbers.

- 106.1 Creation. There is hereby created and established an Examining Board for Plumbers which shall consist of five members and shall hereinafter be referred to as the "Examining Board." Members of the Examining Board shall consist of the Administrative Authority, a registered professional engineer who has passed the mechanical examination of the State of Nebraska, the Chief Plumbing Inspector of the City of Lincoln, and two master plumber contractors registered with the City of Lincoln. The plumbers and professional engineer shall be appointed by the Mayor with the concurrence of the City Council for staggered terms of three years each. Vacancies shall be filled by appointment for the unexpired term only. The Chief Plumbing Inspector shall be the Permanent Secretary of the Examining Board and shall keep a record of all meetings.
- **106.2 Authority.** Unless authority is specifically delegated to other boards provided by this code, the Examining Board shall, subject to the approval of the Mayor, adopt rules and regulations consistent with the provisions of this code for the examination of applicants for registration under the provisions of this code. The Plumbing Code Board of Appeals shall review any written requests of an aggrieved party to the Administrative Authority. Decisions of the Plumbing Code Board of Appeals may be appealed as provided by law. The Examining Board shall determine minimum qualifications for applicants for registration and as part of the rules and regulations shall determine the nature of the examination to be given applicants for registration.
- **106.3 Meeting.** The Examining Board shall meet on the Tuesday following the February, May, August, and November exams of each year. Special meetings may be held when deemed necessary at the call of the chairman. (Ord. 18239 §7; September 15, 2003).

# 24.12.040 Section 107.0 Added; Registration of Plumbers.

Section 107.0 is added to the Uniform Plumbing Code to read as follows:

# 107.0 Registration of Plumbers.

- **107.1 Classification.** There shall be four classes of registrations as follows:
- (1) Master plumber contractor is hereby defined to be any person skilled in the planning, superintending, and material installation of plumbing and drainage and gas piping, and who is familiar with the ordinances and regulations governing the same, and who is competent to install, repair, alter, or remove plumbing or drainage or gas piping with the full responsibility of supervision, whether doing such work by himself or employing journeyman plumbers and plumbing apprentices to assist him.

- (2) Master plumber is hereby defined to be any person skilled in the planning, superintending, and material installation of plumbing and drainage and gas piping, and who is familiar with the ordinances and regulations governing the same, and who is competent to install, repair, alter, or remove plumbing or drainage or gas piping with the full responsibility of supervision, whether doing such work by himself or employing journeyman plumbers and plumbing apprentices to assist him. However, said master plumber cannot take out permits except as provided under Section 24.12. 025, 104.2 for owner occupants.
- (3) Journeyman plumber is hereby defined to be any person employed by a master plumber, other than a plumber's apprentice, who as his principal occupation is engaged in the practical installation, alteration, repair, or removal of plumbing and drainage or gas piping.
- (4) Plumber's apprentice is hereby defined to be a person, other than a master plumber or journeyman plumber, who as his principal occupation is engaged in learning and assisting in the installation, repair, alteration, or removal of plumbing and drainage or gas piping as an employee under the direct supervision and on the same job site of a master plumber or journeyman plumber. Applications for registration shall show compliance with state and federal labor laws.
- 107.2 No person shall engage in or hold himself out as engaging in the plumbing business in the city, or within three miles thereof, or install any piping, fixtures, or other apparatus for supplying water or install any plumbing fixtures, drainage, vents, and water distribution systems except as provided in Section 24.12.025 herein, or install any gas piping system, unless he shall have been duly authorized to do so by registration in one of the classifications above described; except that gas piping systems may also be installed by any person holding an appropriate registration under Chapter 24.05 or 25.03 of this Code.

The Administrative Authority with the approval of the Examining Board shall have sole power to grant certificates to those duly qualified to be registered. It shall be unlawful for any person to perform any plumbing or gas piping work not authorized by the registration certificates issued to him.

**107.3 Application for Registration.** Application for registration as a master plumber contractor, master plumber, journeyman plumber, or plumber's apprentice shall be made in writing to the Administrative Authority on a form furnished by him for such purpose. Such form shall require the name and address of the applicant, the business location of the applicant, a statement of the practical experience of the applicant, and such other relevant information as may be required by the Administrative Authority.

# 107.4 Examination for Registration.

107.4.1 Before any applicant shall be registered as a master plumber contractor, master plumber or journeyman plumber, he shall pay an examination fee and shall be required to submit to and pass a written examination to determine his qualifications and fitness for executing the class of work under this Code and the Lincoln Gas Piping Systems Code covered by the registration for which application is made. Such examination shall normally be given the third Thursday of February, May, August, and November under the direction of the Examining Board. The examination date may be changed by majority approval of the Examining Board and notification of the master plumbing contractors. Any applicant who fails to pass the required examination shall not be eligible to take another examination until at least six months shall have elapsed from the date of last examination.

# 107.4.2 Examination and Registration Fees.

Each applicant for master plumber contractor, master plumber registration or journeyman plumber registration shall pay to the Administrative Authority an examination fee as follows:

Master plumber	contractor and	l master plun	nber	
examination fee				. \$30.00

Iourneyr	nan nlumbei	examination fee	\$30.00
JOUITIC YE	nan pramoci	. CAMITIMIAMON ICC	

Upon initial issuance or subsequent renewal of a registration certificate, a registration fee shall be paid annually to the Administrative Authority as follows:

Master plumber contractor and Master plumber
registration fee
Journeyman plumber registration fee \$10.00
Plumber's apprentice registration fee \$ 5.00

On and after January 1, 2004, each applicant for master plumber contractor, master plumber registration or journeyman plumber registration shall pay to the Administrative Authority an examination fee as follows:

Master plumber contractor and master plumber	
examination fee	\$100.00
Journeyman plumber examination fee	\$ 75.00

On and after January 1, 2004, upon initial issuance or subsequent renewal of a registration certificate, a registration fee shall be paid annually to the Administrative Authority as follows:

Master Plumber Contractor registration fee	\$100.00
Master plumber registration fee	\$50.00
Journeyman plumber registration fee	\$25.00
Plumber's apprentice registration fee	\$15.00

On and after January 1, 2005, upon initial issuance or subsequent renewal of a master plumber contractor registration certificate, a registration fee shall be paid annually to the Administrative Authority as follows:

```
Master Plumber Contractor registration fee . . . . . . . . $175.00
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On and after January 1, 2006, upon initial issuance or subsequent renewal of a master plumber contractor registration certificate, a registration fee shall be paid annually to the Administrative Authority as follows:

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Master Plumber Contractor registration fee . . . . . . . . $250.00.
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**107.4.3 Exemption.** Any person dealing in plumbing materials or supplies, but not engaged in the installation, alteration, repair, or removal of plumbing or drainage systems shall not be required to register hereunder.

Any person duly registered at the time of the adoption of this code shall be automatically registered under his appropriate classification of registration without submitting to an examination.

**107.5** Registration of Corporation, Firm, or Partnership. Any corporation, firm, or partnership may be registered hereunder as a master plumber contractor in the name of such corporation, firm, or partnership, provided that such corporation, firm, or partnership must have a master plumber contractor as a bona fide employee or partner who has submitted to the examination given by the

Examining Board of Plumbers and has thereby shown himself fit, competent and qualified to engage in the business, trade, or calling of a master plumber contractor, and who shall at all times be in actual charge of and responsible for all installation, removal, or repair of plumbing or drainage systems performed by such corporation, firm, or partnership. The registration certificate shall also be issued in the name of the employee or partner registered as a master plumber contractor. In the event the master plumber contractor employee or partner of a corporation, firm, or partnership possessing a certificate of registration shall withdraw therefrom and cease to be connected therewith, then and in such event he shall immediately notify the Administrative Authority, who shall forthwith recommend to the Examining Board that the certificate of registration of such corporation, firm, or partnership be revoked. A master plumber contractor working for and covered by the insurance of a corporation, firm, or partnership registered under this section is not required to duplicate such coverage under his own insurance policy.

**107.6 Expiration and Renewal of Registration.** Registrations shall expire on the thirty-first day of May following the date of issuance. Registration shall not be assignable.

In order to renew a Master plumber or Master plumber contractor certificate or registration issued by the Building and Safety Department of the City of Lincoln, proof of 6 hours of continuing education annually shall be required. The continuing education may consist of training programs, courses, and seminars approved by the Examining Board.

Certificates of registration for journeyman plumbers, at the time of their expiration, may be renewed upon recommendation of the Examining Board without an examination, upon payment of the required annual registration fee.

Certificates of registration for plumber's apprentice may be renewed upon payment of the required annual registration fee.

Any person registered under the provisions of this code as a master plumber contractor, master plumber or a journeyman plumber who does not renew his certificate of registration within a period of sixty days after the expiration of same shall pay the examination fee required by this code for a master plumber contractor, master plumber or a journeyman plumber, as the case may be, and shall submit himself to and pass the regularly scheduled examination given by the Examining Board before such person can be again registered hereunder.

No registered master plumber contractor, master plumber or journeyman plumber shall employ any person as a plumber's apprentice who is not registered as a plumber's apprentice within the City of Lincoln. No plumber's apprentice shall be permitted to work at the installation, alteration, repair, or removal of any plumbing or drainage except under the direct supervision and on the same job site of a duly registered master plumber contractor, master plumber or journeyman plumber.

**107.7 Suspension or Revocation of Certificate of Registration.** The Examining Board of Plumbers, after hearing as hereinafter specified and upon the recommendations of the Administrative Authority, shall have the power to suspend or revoke any master plumber contractor, master plumber or journeyman plumber certificate of registration if the same was obtained by error or fraud, or if the holder thereof is shown to be no longer qualified, or if such holder fails, neglects, or refuses to comply with the provisions of this code.

If suspension or revocation of a master plumber contractor, master plumber or journeyman plumber certificate of registration is recommended as above provided, the Examining Board shall cause written notice to be served upon the registered plumber whose registration is recommended for suspension or revocation, setting forth a time and place for a public hearing. Upon the conclusion of such hearing, the Examining Board shall within thirty days thereafter render a written decision to such registered plumber regarding suspension or revocation of his registration. Such written decision shall be served by mailing it to such registered plumber by certified mail at his last known business address or by personal service. If a certificate of registration is revoked, the holder of the same shall not apply for registration until one year after the date of such revocation. Decisions of the Examining Board concerning suspension or revocation of registration may be appealed as provided by law.

It shall be unlawful for any registered plumber to allow his name to be used by an other person, directly or indirectly, to obtain a permit for the installation, alteration, or repair of any plumbing or drainage system. Violation of this section shall be sufficient grounds for suspension or revocation of said certificates of registration as herein provided.

**107.8 Identification of Contractors.** All registered plumbing contractors shall display their registration number on all vehicles while they are engaged in the installation, repair, or replacement of plumbing equipment. The registration number, with at least two-inch numbers, shall be readily visible on each side of the vehicle. The registration number shall be included in all printed advertisements. (Ord. 18239 §8; September 15, 2003).

#### 24.12.045 Section 108.0 Added; Certificate of Insurance.

Section 108.0 is added to the Uniform Plumbing Code to read as follows:

#### 108.0 Certificate of Insurance.

- **108.1** Before any master plumber contractor as herein defined may be issued a permit under the provisions of this code, such master plumber contractor shall be required to:
- (1) At all times maintain public liability insurance coverage for all claims arising out of all work in the City of Lincoln and within three miles of the corporate limits thereof done by or under the supervision of the master plumber under the provisions of this code. Such insurance shall be in the form of a commercial or comprehensive general liability policy, or an acceptable substitute policy form as permitted by the City Attorney, with a minimum combined single limit of \$500,000.00 aggregate for any one occurrence on any job for which a permit is required under this code, provided the City of Lincoln shall be named an additional insured thereunder. The coverages required herein shall be subject to review and approval by the City Attorney for conformance with the provisions of this section.
- (2) At all times keep on file with the Administrative Authority a current certificate of insurance signed by a qualified agent of an insurance company licensed to do business in the State of Nebraska and approved by the City Attorney for conformance with the provisions of this section evidencing the existence of valid and effective policies of insurance naming the city as an additional insured for the coverage required by subsection (1) of this section, the limits of each policy, the policy number, the name of the insurer, the effective date and expiration date of each policy, the deductibles or self-insurance retainers of each policy, and a copy of an endorsement placed on each policy requiring thirty days notice

by mail to the Administrative Authority before the insurer may cancel the policy for any reason, and upon request of the Administrative Authority or the City Attorney, a copy of any endorsements placed on such policies or the declarations page of such policies.

Any termination, reduction, or lapse of such insurance shall automatically terminate the master plumber contractor's privilege to be issued permits under the provisions of this code, unless other insurance meeting the requirements of this section is provided and in full force and effect at the time of such expiration or cancellation.

**108.2 Payment Bond.** Before any master plumber contractor, as defined herein, may be issued a permit to make excavations in the public ways of the city, such master plumber contractor shall deposit with the Administrative Authority a \$5,000.00 payment bond. Said bond shall provide that the master plumber contractor shall pay to the city the cost of refilling such excavation and replacing the surface thereof. Failure to keep payments for excavation backfills and resurfacing in accordance with Public Works and Utilities Department policy shall be grounds for withholding further permits of any kind until such backlog of charges are paid in full. (Ord. 18239 §9; September 15, 2003).

# 24.12.050 Section 109.0 Added; Sanitary Sewer Connection.

Section 109.0 is added to the Uniform Plumbing Code to read as follows:

- 109.0 Sanitary Sewer Connection.
- **109.1 Outside Corporate City Limits.** In the event premises outside of the corporate limits of the city desire to be connected to the public sanitary sewer system, such connection shall be permitted only by executive order of the Mayor, and the charges for such connection shall be determined by the City Council.
- **109.2** Connection to Public Water or Sanitary Sewer System by Nonabutting Agreement. In the event the public water system or public sanitary sewer system is not available to a premises, then such premises may be permitted to connect to such public systems by specific request to the Director of Public Works and Utilities. A public water or sanitary sewer system shall be deemed available to a premises if such premises are within 300 feet, measured along a street, alley, or public utility easement.
- **109.3 Registered Master Plumber to Install Sewer to Tap.** No person other than a registered master plumber contractor or his full-time employee registered as a plumber shall install the sanitary building sewer drain to its point of connection to the sanitary sewer main except as permitted in Section 24.12.025.
- **109.4 Sanitary Sewer Tap Permit.** A sanitary sewer tap permit may be obtained by filing a written application therefor on a form furnished by the wastewater system. Such form shall require a description of the sanitary building sewer material, the location and ownership of the premises in connection therewith, the location and depth of the sanitary building sewer at its point of connection with the public sanitary sewer main, and such other information as may reasonably be required by the wastewater system. A sanitary sewer tap permit may be issued only to a properly registered master plumber contractor of the City of Lincoln. The registered master plumber contractor to whom the permit has been issued shall notify the wastewater system at least six hours in advance of the time the tap is to be made.
- **109.5 Making Tap.** No person, except an employee of the wastewater system shall, under any circumstances, tap the public sanitary sewer mains, except by special authorization of the Director of Public

Works and Utilities. The registered master plumber contractor shall be responsible to see that all necessary excavation shall be made and all dirt cleaned from around the sanitary sewer main sufficiently to permit the making of the tap. The registered master plumber contractor shall be responsible to see that shoring or bracing of the excavation is installed and shall not be backfilled until the tap is made by the wastewater system and the sanitary building sewer connection to the tap has been inspected and approved by the Plumbing Inspection Department in the Department of Building and Safety.

**109.6 Tap Fees.** The tap to be used in making the connection to the public sanitary sewer main shall be furnished by the wastewater system and the cost thereof, together with the installation cost, shall be paid by the registered master plumber contractor to the wastewater system at the time of issuance of the tap permit. (Ord. 18239 §10; September 15, 2003).

# 24.12.055 Section 212.0 Amended; Definitions - J.

Section 212.0 of the Uniform Plumbing Code is amended by adding the following definition for "job site":

**Job Site** – The Address for which the permit is issued. (Ord. 18239 §11; September 15, 2003).

# 24.12.060 Section 218.0 Amended; Definitions - P.

Section 218.0 of the Uniform Plumbing Code is amended by amending the definition of "plumbing system" and adding the definition of "premises" as follows:

**Plumbing System** -- Includes all potable water building supply and distribution pipes, all plumbing fixtures and traps, all drainage and vent pipe(s), and all building drains and building sewers, including all building drains and building sewers, including their respective joints and connection, devices, receptors, and appurtenances within the property lines of the premises and shall include potable water piping, potable water treating or using equipment, water heaters and vents for same.

**Premises** – A tract of land and the buildings upon it, consisting of one platted lot or irregular tract, or more than one platted lot or irregular tract and the buildings or part of a building upon it; provided, such lots are under common ownership and contiguous. (Ord. 18239 §12; September 15, 2003).

#### 24.12.065 Section 224.0 Amended; Definitions - V.

Section 224.0 of the Uniform Plumbing Code is amended by adding the definition of "vent, loop" as follows:

**Vent, Loop** – A circuit which loops back to connect with a stack vent instead of a vent stack. (Ord. 18239 §13; September 15, 2003).

# 24.12.070 Section 311.1 Amended; Drainage Fitting.

Section 311.1 of the Uniform Plumbing Code is amended to read as follows:

**311.1 Drainage fitting.** No double hub fitting, single or double tee branch, single or double tapped tee branch, running thread, band, or saddle shall be used as a drainage fitting, except that a double hub sanitary tapped tee may be used on a vertical line as a fixture connection.(Ord. 18239 §14; September 15, 2003).

#### 24.12.075 Section 311.3 Deleted; Waste Connection.

Section 311.3 of the Uniform Plumbing Code is hereby deleted.(Ord. 18239 §15; September 15, 2003).

#### 24.12.080 Section 311.4 Deleted; Vent Pipe.

Section 311.4 of the Uniform Plumbing Code is hereby deleted.(Ord. 18239 16; September 15, 2003).

# 24.12.085 Section 311.8 Amended; Screwed Fittings.

Section 311.8 of the Uniform Plumbing Code is amended to read as follows:

**311.8 Screwed Fittings.** Screwed fittings shall be cast iron, copper, copper alloy, malleable iron, PVC, steel, or other approved materials. Threads shall be tapped out of solid metal or molded in solid or PVC. (Ord. 18239 §17; September 15, 2003).

# 24.12.090 Section 312.1 Added; Structures Considered as One Building.

Section 312.1 is added to the Uniform Plumbing Code to read as follows:

312.1 Structures Considered as One Building. Any structure having common exterior walls and roof and designed and approved by the Administrative Authority to be owned and used by separate owners may be considered as one building for the purposes of Section 312.0 above; provided, that an agreement, approved by the City Attorney as meeting the requirements of this section, binding upon all present and future owners of the structure has been recorded in the office of the Lancaster County Register of Deeds granting to all owners of the structure or portion thereof easement and access rights for the construction, maintenance, repair, and replacement of the common sanitary building drain and sanitary building sewer elements of such structure; and further, providing as among the owners of the structure for the responsibility for and the payment of all expense of such construction, maintenance, repair and replacement of such common sanitary building drain and sanitary building sewer. Before the issuance of a plumbing permit for any plumbing for such structure or portion thereof, the agreement shall be executed and approved and shall be recorded by owners at their expense with the Lancaster County Register of Deeds. (Ord. 18239 §18; September 15, 2003).

# 24.12.095 Section 315.4 Amended; Trenching, Excavation, and Backfill.

Section 315.4 of the Uniform Plumbing Code is amended to read as follows:

315.4 All excavations shall be completely backfilled as soon after inspection as practicable. Adequate precaution shall be taken to insure proper compactness of backfill around piping without damage to such piping. Trenches shall be backfilled with clean earth which shall not contain stones, boulders, cinderfill, frozen earth, construction debris or other materials which would damage or break the piping or cause corrosive action. Mechanical devices such as bulldozers, graders, etc., may then be used to complete backfill to grade. Fill shall be properly compacted. Suitable precautions shall be taken to insure permanent stability for pipe laid in filled or made ground.(Ord. 18239 §19; September 15, 2003).

# 24.12.100 Section 316.1.7 Deleted; Brazing and Welding.

Section 316.1.7 of the Uniform Plumbing Code is hereby deleted. (Ord. 18239 §20; September 15, 2003).

#### 24.12.105 Section 316.3.2 Deleted; Fixture Connections.

Section 316.3.2 of the Uniform Plumbing Code is hereby deleted.(Ord. 18239 §21; September 15, 2003).

# 24.12.110 Section 401.2 Amended; Lead.

Section 401.2 of the Uniform Plumbing Code is amended to read as follows:

**401.2 Lead.** See Table 14-1. Sheet lead shall be not less than the following:

For safe pans – not less than 2 1/2 pounds per square foot or (19.5 kg/m) or 1/16 inch (1.6 mm) thick.(Ord. 18239 §22; September 15, 2003).

#### 24.12.115 Section 402.6 Deleted; Metered Faucets.

Section 402.6 of the Uniform Plumbing Code is hereby deleted.(Ord. 18239 §23; Sept. 15, 2003).

# 24.12.120 Section 405.4 Amended; Strainers and Connections.

Section 405.4 of the Uniform Plumbing Code is amended to read as follows:

**405.4** Approved wye or other directional type branch fittings shall be installed in all continuous wastes connecting or receiving the discharge from food waste disposal units, dishwashers, clothes washers, or other force discharge fixtures or appliances.(Ord. 18239 §24; September 15, 2003).

#### 24.12.125 Section 412.8 Amended; Floor Drains and Shower Stalls.

Section 412.8 of the Uniform Plumbing Code is amended to read as follows:

- **412.8** When the construction of on-site built-up shower receptors is permitted by the Administrative Authority, one of the following means shall be employed:
- (1) Shower receptors built directly on the ground: Shower receptors built directly on the ground shall be watertight and shall be constructed from approved type dense, non-absorbent and non-corrosive materials. Each such receptor shall be adequately reinforced, shall be provided with an approved flanged floor drain designed to make a watertight joint in the floor, and shall have smooth, impervious, and durable surfaces.
- (2) Shower receptors built above ground: When shower receptors are built above ground the sub-floor and rough side of walls to a height of not less than three (3) inches (76 mm) above the top of the finished dam or threshold shall be first lined with sheet plastic\*, lead\* or copper\* or shall be lined with other durable and watertight materials. All lining materials shall be pitched one-quarter (1/4) inch per foot (20.9 mm/m) to weep holes in the sub drain of a smooth and solidly formed sub-base. All such lining materials shall extend upward on the rough jambs of the shower opening to a point no less than three (3) inches (76 mm) above the top of the finished dam or threshold and shall extend outward over the top of

the rough threshold and be turned over and fastened on the outside face of both the rough threshold and the jambs.

Linings shall be properly recessed and fastened to approved backing so as not to occupy the space required for the wall covering and shall not be nailed or perforated at any point which may be less than one (1) inch (25.4 mm) above the finished dam or threshold. An approved type sub-drain shall be installed with every shower sub-pan or lining. Each such sub-drain shall be of the type that sets flush with the sub-base and shall be equipped with a clamping ring or other device to make a tight connection between the lining and the drain. The sub-drain shall have weep holes into the waste line. The weep holes located in the sub drain clamping ring shall be protected from clogging. All shower lining materials shall conform to approved standards acceptable to the Administrative Authority.

\*Lead and copper sub-pans or linings shall be insulated from all conducting substances other than their connecting drain by fifteen (15) pound (6.8 kg) asphalt felt or its equivalent and no lead pan or liner shall be constructed of material weighing less than four (4) pounds per square foot (19.5 kg/m  $^2$ ). Copper pans or liners shall be at least No. 24 B & S Gauge (0.02 inches) (0.5 mm). Joints in lead pans or liners shall be burned. Joints in copper pans or liners shall be soldered or brazed. Plastic pans shall not be coated with asphalt based materials.

(Ord. 18239 §25; September 15, 2003).

# 24.12.130 Section 420.0 Amended; Shower and Tub/Shower Combination Control Valves.

Section 420.0 of the Uniform Plumbing Code is amended to read as follows:

**420.0** Shower and Tub/Shower Combination Control Valves. Showers and tub-shower combinations in all buildings shall be provided with individual control valves of the pressure balance or the thermostatic mixing valve type. Gang showers, when supplied with a single temperature controlled water supply pipe, may be controlled by a master thermostatic mixing valve in lieu of individually controlled pressure balance or thermostatic mixing valves. Handle position stops shall be provided on such valves and shall be adjusted per the manufacturer's instructions to deliver a maximum mixed water setting of 120°F (49°C). The water heater thermostat shall not be considered a suitable control for meeting this provision. This does not apply to single family dwellings.(Ord. 18239 §26; September 15, 2003).

#### 24.12.135 Section 505.2 Deleted; Gas-Fired Water Heater Approval Requirements.

Section 505.2 of the Uniform Plumbing Code is hereby deleted.(Ord. 18239 §27; September 15, 2003).

#### 24.12.140 Section 510.5 Deleted; Water Heaters; Protection from Damages.

Section 510.5 of the Uniform Plumbing Code is hereby deleted.(Ord. 18239 §28; September 15, 2003).

#### 24.12.145 Section 510.8 Deleted; Relief Valve Discharge.

Section 510.8 of the Uniform Plumbing Code is hereby deleted.(Ord. 18239 §29; September 15, 2003).

# 24.12.150 Sections 512.0 through 525.0 Deleted; Venting of Water Heaters.

Sections 512.0 through 525.0 of the Uniform Plumbing Code are hereby deleted.(Ord. 18239 §30; September 15, 2003).

#### 24.12.155 Section 601.2.3 Deleted; Reclaimed Water.

Section 601.2.3 of the Uniform Plumbing Code is hereby deleted.(Ord. 18239 §31; September 15, 2003).

# 24.12.160 Section 603.4.6 Amended; Protection from Lawn Sprinklers and Irrigation Systems.

Section 603.4.6 of the Uniform Plumbing Code is amended to read as follows:

# 603.4.6 Protection from Lawn Sprinklers and Irrigation Systems.

Authority for a permit for the installation of any underground irrigation system. All such applications when required by the Administrative Authority shall be accompanied by plans and specifications in duplicate and in sufficient detail to show clearly the underground supply piping, pipe sizes, depth of pipes below ground surface, location of valves, backflow preventer devices, adjacent curbs, sidewalks, property lines, and such other data as may be pertinent to the installation. Said plans shall show in particular all piping that is proposed to be located in the public right-of-way, and such piping may be permitted, provided, however, that such permission and the issuance of a permit for the installation of an underground irrigation system wholly or partly in the public right-of-way shall be granted as a privilege. Said plans shall further show in detail the location of the water meter in relation to the water service and the location at which the underground irrigation system is connected to the water service pipe, and a diagram locating all heads, valves, shutoffs, drains, and distribution pipes.

**603.4.6.2** Potable water supplies to systems having no pumps or connections for pumping equipment, and no chemical injection or provisions for chemical injection, shall be protected from backflow by one of the following devices:

- 1. Atmospheric vacuum breaker
- 2. Pressure vacuum breaker
- 3. Reduced pressure backflow preventor

**603.4.6.3** Where sprinkler and irrigation systems have pumps, connections for pumping equipment, auxiliary air tanks or are otherwise capable of creating back-pressure, the potable water supply shall be protected by the following type of device if the backflow device is located upstream from the source of back-pressure.

- 1. Reduced pressure backflow preventor
- **603.4.6.4** Where systems have a backflow device installed downstream from a potable water supply pump or a potable water supply pump connection, the device shall be one of the following:
  - 1. Atmospheric vacuum breaker
  - 2. Pressure vacuum breaker
  - 3. Reduced pressure backflow preventor

**603.4.6.5** Where systems include a chemical injector or any provisions for chemical injection, the potable water supply shall be protected by the following:

1. Reduced pressure backflow preventor.

(Ord. 18239 §32; September 15, 2003).

# 24.12.165 Section 603.4.18 Deleted; Protection from Fire Systems.

Section 603.4.18 of the Uniform Plumbing Code and all subsections thereof are hereby deleted. (Ord. 18239 §33; September 15, 2003).

# 24.12.170 Section 603.4.21 Deleted; Water Heater Connectors.

Section 603.4.21 of the Uniform Plumbing Code is hereby deleted. (Ord. 18239 §34; September 15, 2003).

# 24.12.175 Section 604.1 Amended; Materials.

Section 604.1 of the Uniform Plumbing Code is amended to read as follows:

**604.1** Water distribution pipe, building supply water pipe and fittings shall be of brass, copper, cast iron, galvanized malleable iron, galvanized wrought iron, galvanized steel, or other approved materials. PEX water pipe manufactured to recognized standards may be used for cold water distribution systems outside a building. PEX water pipe, tubing, and fittings, manufactured to recognized standards may be used for hot and cold water distribution systems within a building. All materials used in the water supply system, except valves and similar devices shall be of a like material, except where otherwise approved by the Administrative Authority.(Ord. 18239 §35; September 15, 2003).

### 24.12.180 Section 604.2 Amended; Copper Tube.

Section 604.2 of the Uniform Plumbing Code is amended to read as follows:

**604.2** Copper tube for water piping shall have a weight of not less than Type L.

EXCEPTION: Type M copper tubing may be used for water piping when piping is above ground in, or on, a building.(Ord. 18239 §36; September 15, 2003).

# 24.12.185 Section 604.4 Deleted; Materials.

Section 604.4 of the Uniform Plumbing Code is hereby deleted.(Ord. 18239 §37; September 15, 2003).

# 24.12.190 Section 604.12 Deleted; Flexible Corrugated Connectors.

Section 604.12 of the Uniform Plumbing Code is hereby deleted.(Ord. 18239 §38; September 15, 2003).

# 24.12.195 Section 606.2.2 Deleted; Plastic Fittings.

Section 606.2.2 of the Uniform Plumbing Code is hereby deleted.(Ord. 18239 §39; September 15, 2003).

#### 24.12.200 Section 608.5 Amended: Use of Joints.

Section 608.5 of the Uniform Plumbing Code is amended to read as follows:

**608.5 Use of Joints.** Relief valves located inside a building shall be provided with a drain, not smaller than the relief valve outlet, of galvanized steel, hard drawn copper piping and fittings, or listed relief valve drain tube with fittings which will not reduce the internal bore of the pipe or tubing (straight lengths as opposed to coils) and shall extend from the valve to the outside of the building with the end of the pipe not more than two (2) feet (610 mm) nor less than six (6) inches (152 mm) above the ground or the flood level of the area receiving the discharge and pointing downward. Such drains may terminate at other approved locations. No part of such drain pipe shall be trapped or subject to freezing. The terminal end of the drain pipe shall not be threaded. (Ord. 18239 §40; September 15, 2003).

#### 24.12.205 Section 609.1 Amended; Installation.

Section 609.1 of the Uniform Plumbing Code is amended to read as follows:

**609.1 Installation.** All water piping shall be adequately supported to the satisfaction of the Administrative Authority. Burred ends shall be reamed to the full bore of the pipe or tube. Changes in direction shall be made by the appropriate use of fittings, except that changes in direction in copper tubing may be made with bends, provided that such bends are made with bending equipment which does not deform or create a loss in the cross-sectional area of the tubing. Changes in direction are allowed with flexible pipe and tubing without fittings in accordance with the manufacturer's installation instructions. Provisions shall be made for expansion in hot water piping. All piping, equipment, appurtenances, and devices shall be installed in a workman-like manner in conformity with the provisions and intent of the Code. All water service yard piping shall be at least twelve (12) inches (305 mm) below the average local frost depth.(Ord. 18239 §41; September 15, 2003).

#### 24.12.210 Section 609.2 Amended; Installation Testing, Unions, and Location.

Section 609.2 of the Uniform Plumbing Code is amended to read as follows:

- **609.2 Installation Testing, Unions, and Location.** Water pipes shall not be run or laid in the same trench as building sewer or drainage piping unless both of the following conditions are met:
- **609.2.1** The bottom of the water pipe, at all points, shall be at least twelve (12) inches (305 mm) above the top of the sewer or drain line.
- **609.2.2** The water pipe shall be placed on a solid shelf excavated at one side of the common trench with a minimum clear horizontal distance of at least twelve (12) inches (305 mm) from the sewer or drain line. Water pipes crossing sewer or drainage piping shall maintain a 12-inch separation. (Ord. 18239 §42; September 15, 2003).

# 24.12.215 Section 609.3.1 Deleted; Ferrous Piping.

Section 609.3.1 of the Uniform Plumbing Code is hereby deleted. (Ord. 18239 §43; September 15, 2003).

#### **24.12.220** Section 609.5 Deleted; Unions.

Section 609.5 of the Uniform Plumbing Code is hereby deleted. (Ord. 18239 §44; September 15, 2003).

#### 24.12.225 Section 609.6 Deleted; Location.

Section 609.6 of the Uniform Plumbing Code is hereby deleted.(Ord. 18239 §45; September 15, 2003).

#### 24.12.230 Section 609.7 Deleted; Use of Abutting Lots.

Section 609.7 of the Uniform Plumbing Code and all subsections thereof are hereby deleted. (Ord. 18239 §46; September 15, 2003).

# 24.12.235 Section 609.10 Amended; Water Hammer.

Section 609.10 Of the Uniform Plumbing Code is amended to read as follows:

**609.10 Water Hammer.** All building water supply systems in which quick-acting valves are installed shall be provided with devices to absorb the hammer caused by high pressures resulting from the quick closing of these valves. These pressure-absorbing devices shall be either air chambers or approved mechanical devices. Water pressure absorbing devices shall be installed as close as possible to quick-acting valves.

EXCEPTION: Shall not be required in residential installations. (Ord. 18239 §47; September 15, 2003).

#### 24.12.240 Section 609.10.1 Amended; Air Chambers.

Section 609.10.1 of the Uniform Plumbing Code is amended to read as follows:

**609.10.1 Air Chambers** Air chambers shall be sized in accordance with Table 6-6. (Ord. 18239 §48; September 15, 2003).

# 24.12.245 Table 6-4 Amended; Water Supply Fixture Units.

Table 6-4 of the Uniform Plumbing Code is amended to read as follows:

(See Table 6-4 on following page)

# TABLE 6-4 Water Supply Fixture Units (WSFU) and Minimum Fixture Branch Pipe Sizes <sup>3</sup> 1/2 inch = 15 mm 3/4 inch = 20 mm 1 inch = 25 mm

#### Minimum Fixture Branch Pipe Size 1,3 Assembly 5 Private **Public** Appliances, Appurtenances or Fixtures<sup>2</sup> 4.0 4.0 10.0 10.0 1.0 4.0 4.0 1.0 1.5 1.5 0.5 0.5 0.75 2.5 2.5 1.0 1.0 1.0 1.0 1.0 12.0 Sinks 1.0 2.0 3.0 Clinic Flushometer Valve 8.0 1.5 1.5 1.5 1.5 1.5 3.0 2.0 2.0 2.0 See Footnote 6 See Footnote 6 2.0 2.0 3.0 Wash fountain, circular spray ......3/4" 4.0 2.5 2.5 3.5 2.5 2.5 3.5 See Footnote 6 3.0 5.5 7.0

#### Notes:

- 1. Size of the cold branch pipe, or both the hot and cold branch pipes.
- 2. Appliances, Appurtenances or Fixtures not included in this Table may be sized by reference to fixtures having a similar flow rate and frequency of use.

See Footnote 6

- 3. The listed minimum supply branch pipe sizes for individual fixtures are the nominal (I.D.) pipe size.
- 4. For fixtures or supply connections likely to impose continuous flow demands, determine the required flow in gallons per minute (GPM) and add it separately to the demand (in GPM) for the distribution system or portions thereof.
- 5. Assembly [Public Use (See Table 4-1)].
- 6. When sizing flushometer systems see Section 610.10.

Water Closet, greater than 1.6 GPF Flushometer Valve . . . . . . . . . . . . 1"

7. Reduced fixture unit loading for additional hose bibbs as used is to be used only when sizing total building demand and for pipe sizing when more than one hose bibb is supplied by a segment of water distributing pipe. The fixture branch to each hose bibb shall be sized on the basis of 2.5 fixture units.

(Ord. 18239 §49; September 15, 2003).

# 24.12.250 Section 701.1 Amended; Drainage Systems; Materials.

Section 701.1 of the Uniform Plumbing Code is amended to read as follows:

- **701.1** Drainage piping shall be cast iron, galvanized steel, galvanized wrought iron, lead, copper, brass, Schedule 40 PVC DWV, extra strength vitrified clay pipe, or other approved materials having a smooth and uniform bore, except that:
- **701.1.1** No galvanized wrought iron or galvanized steel pipe shall be used underground and shall be kept at least six (6) inches (152 mm) above ground.
- **701.1.2** PVC DWV piping installations shall be installed in accordance with IS 5, IS 9 and Chapter 15 "Firestop Protection for DWV and Stormwater Application". Except for individual single family dwelling units, materials exposed within ducts or plenums shall have a flame-spread index of not more then 25 and a smoke-developed index of not more than 50, when tested in accordance with the Test for Surface -Burning Characteristics of the Building Materials (See the Building Code standards based on ASTM E-84 and ANSI/UL 723.).
- **701.1.3** No vitrified clay pipe or fittings shall be used above ground or where pressurized by a pump or ejector. They shall be kept at least twelve (12) inches (305 mm) below ground.
- **701.1.4** Copper tube for drainage and vent piping shall have a weight of not less than that of copper drainage tube type DWV.

EXCEPTION: Type L shall be required underground. (Ord. 18239 §50; September 15, 2003).

# 24.12.255 Section 701.2 Amended; Materials; Drainage Fittings.

Section 701.2 of the Uniform Plumbing Code is amended to read as follows:

**701.2** Drainage fittings shall be of cast iron, malleable iron, lead, brass, copper, PVC, vitrified clay, or other approved materials having a smooth interior waterway of the same diameter as the piping served and all such fittings shall be compatible with the type of pipe used. (Ord. 18239 §51; September 15, 2003).

# **24.12.260** Section 701.3 Amended; Lead.

Section 701.3 of the Uniform Plumbing Code is amended to read as follows:

**701.3 Lead.** See Table 14-1. Sheet lead shall be not less than the following:

For safe pans – not less than 2 1/2 pounds per square foot or 1/16 inch (1.6 mm) thick. For flashings or vent terminals – not less than 2 1/2 pounds per square foot or 1.2 mm thick. Lead bends and lead traps shall not be less than one-eighth (1/8) inch (3.2 mm) wall thickness. (Ord. 18239 §52; September 15, 2003).

# 24.12.265 Section 703.1 Amended; Building Drain (Minimum Size).

Section 703.1 of the Uniform Plumbing Code is amended to read as follows:

**703.1 Building Drain** (**Minimum Size**). Building drains serving a single structure shall be a minimum of four inches to the first three-inch or larger stack.

EXCEPTION: Where the sewer comes in above the basement floor or where the house drain runs above the ground, in which case each four-inch sewer shall have one four-inch cleanout at the basement wall and may be reduced to three inch at that point. (Ord. 18239 §53; September 15, 2003).

# 24.12.270 Table 7-3 Amended; Drainage Fixture Unit Values.

Table 7-3 of the Uniform Plumbing Code is amended as follows:

# TABLE 7-3 Drainage Fixture Unit Values (DFU) 1 1/4 inch = 32 mm 1 1/2 inch = 40 mm 2 inch = 50 mm 2 1/2 inch = 65 mm 3 inch = 80 mm

	Min. Size			
	Trap and			
	Trap Arm 7	Private	Public	Assembly 8
Plumbing Appliance, Appurtenance or Fixture				
Bathtub or Combination Bath/Shower	1-1/2"	2.0	2.0	
Bidet	1-1/4"	1.0		
Bidet	1-1/2"	2.0		
Clothes Washer, domestic, standpipe 5	2"	3.0	3.0	3.0
Dental Unit, cuspidor	1-1/4"	1.0	1.0	
Dishwasher, domestic, with independent drain	1-1/2"2	2.0	2.0	2.0
Drinking Fountain or Water cooler (per head)	1-1/4"	0.5	0.5	1.0
Food-waste-grinder, commercial	2"		3.0	3.0
Floor Drain, emergency	2"		0.0	0.0
Floor Drain (for additional sizes see Section 702)	2"	2.0	2.0	2.0
Shower single head trap	2"	2.0	2.0	2.0
Multi-head, each additional	2"	1.0	1.0	1.0
Lavatory, single	1-1/4"	1.0	1.0	1.0
Lavatory in sets of two or three	1-1/2"	2.0	2.0	2.0
Wash fountain	1-1/2"	2.0	2.0	
Wash fountain	2"	3.0	3.0	
Mobile Home, trap	3"	12.0		
Receptor, indirect waste 1,3	1-1/2"		See	footnote 1,3
Receptor, indirect waste 1,4	2"		See	footnote 1,4
Receptor, indirect waste 1	3"		See	footnote 1
Sinks				
Bar	1-1/2"	1.0		
Bar	1-1/2" <sup>2</sup>		2.0	2.0
Clinical	-		6.0	6.0
Commercial with food waste	1-1/2" <sup>2</sup>		3.0	3.0
Special Purpose	1-1/2"	2.0	3.0	3.0
Special Purpose	2"	3.0	4.0	4.0
Special Purpose	3"		6.0	6.0

Kitchen, domestic	2.0	2.0	
Laundry	2.0	2.0	2.0
(with or without discharge from a clothes washer)			
Service or Mop Basin2"		3.0	3.0
Service or Mop Basin3"		3.0	3.0
Service, flushing rim3"		6.0	6.0
Wash, each set of faucets		2.0	2.0
Urinal, integral trap 1.0 GPF <sup>2</sup>	2.0	2.0	5.0
Urinal, integral trap greater than 1.0 GPF	2.0	2.0	6.0
Water Closet, 1.6 GPF Gravity Tank <sup>6</sup>	3.0	4.0	6.0
Water Closet, 1.6 GPF Flushometer Tank 6	3.0	4.0	6.0
Water Closet, 1.6 GPF Flushometer Valve <sup>6</sup>	3.0	4.0	6.0
Water Closet, greater than 1.6 GPF Gravity Tank 6	4.0	6.0	8.0
Water Closet, greater than 1.6 GPF Flushometer Valve <sup>6</sup> 3"	4.0	6.0	8.0

- 1. Indirect waste receptors shall be sized based on the total drainage capacity of the fixtures that drain therein to, in accordance with Table 7-4
- 2. Provide a 2" (51 mm) minimum drain.
- 3. For refrigerators, coffee urns, water stations, and similar low demands.
- 4. For commercial sinks, dishwashers, and similar moderate or heavy demands.
- 5. Buildings having a clothes washing area with clothes washers in a battery of three (3) or more clothes washers shall be rated at six (6) fixture units each for purposes of sizing common horizontal and vertical drainage piping.
- 6. Water closets shall be computed as six (6) fixture units when determining septic tank sizes based on Appendix K of this Code.
- 7. Trap sizes shall not be increased to the point where the fixture discharge may be inadequate to maintain their self-scouring properties.
- 8. Assembly [Public Use (See Table 4-1)].

(Ord. 18239 §54; September 15, 2003).

#### 24.12.275 Section 704.2 Deleted; Fixture Connections.

Section 704.2 of the Uniform Plumbing Code is hereby deleted. (Ord. 18239 §55; September 15, 2003).

# 24.12.280 Section 704.3 Amended; Fixture Connections.

Section 704.3 of the Uniform Plumbing Code is amended to read as follows:

**704.3** Pot sinks, scullery sinks, dishwashing sinks, silverware sinks, commercial dishwashing machines, silverware-washing machines, and other similar fixtures may be connected directly to the drainage system. A floor drain shall be provided adjacent to the fixture, and the fixture shall be connected on the sewer side of the floor drain trap, provided that no other drainage line is connected between the floor drain waste connection and the fixture drain. The fixture and floor drain shall be trapped and vented as required by this Code.

EXCEPTION: Each unit shall discharge through an approved air gap fitting and be separately trapped or discharge indirectly into a properly trapped and vented fixture. (Ord. 18239 §56; September 15, 2003).

# 24.12.285 Section 704.4.1 Amended; Closet Rings (Closet Flanges).

Section 704.4.1 of the Uniform Plumbing Code is amended to read as follows:

**704.4.1** Closet rings (closet flanges) for water closets or similar fixtures shall be of an approved type and shall be bronze, copper, hard lead, cast iron, galvanized malleable iron, PVC, or other approved

materials. Each such closet ring (closet flange) shall be approximately seven (7) inches (175 mm) in diameter and, when installed, shall, together with the soil pipe, present a one and one-half (1-1/2) inch (38 mm) wide flange or face to receive the fixture gasket or closet seal. (Ord. 18239 §57; September 15, 2003).

### 24.12.290 Section 704.4.3 Amended; Closet Rings (Closet Flanges).

Section 704.4.3 of the Uniform Plumbing Code is amended to read as follows:

**704.4.3** Closet rings (closet flanges) shall be burned or soldered to lead bends or stubs, shall be caulked to cast iron soil pipe, shall be solvent cemented to PVC and shall be screwed or fastened in an approved manner to other materials. (Ord. 18239 §58; September 15, 2003).

# 24.12.295 Section 705.1.4 Deleted; Asbestos Cement Sewer Pipe Joints.

Section 705.1.4 of the Uniform Plumbing Code is hereby deleted. (Ord. 18239 §59; September 15, 2003).

# 24.12.300 Section 706.2 Amended; Changes in Direction of Drainage Flow.

Section 706.2 of the Uniform Plumbing Code is amended to read as follows:

**706.2** Horizontal drainage lines, connecting with a vertical stack, shall enter through forty-five (45) degree (0.79 rad) waye branches, sixty (60) degree (1.05 rad) waye branches, combination waye and 1/8 bend branches, sanitary tee or sanitary tapped tee branches, or other approved fittings of equivalent sweep.

EXCEPTION: Sanitary crosses may be used on tank type water closets and storm drains only. (Ord. 18239 §60; September 15, 2003).

### 24.12.305 Section 713.4 Amended; Sewers Required.

Section 713.4 of the Uniform Plumbing Code is amended to read as follows:

**713.4** The public sewer may be considered as not being available when such public sewer or any building or any exterior drainage facility connected thereto, is located more than three hundred (300) feet (91.4 m) from any proposed building or exterior drainage facility on any lot or premises which abuts and is served by such public sewer. (Ord. 18239 §61; September 15, 2003).

#### 24.12.310 Section 719.6 Amended; Cleanouts.

Section 719.6 of the Uniform Plumbing Code is amended to read as follows:

**719.6** Approved manholes may be installed in lieu of clean outs when first approved by the Administrative Authority. The maximum distance between manholes shall not exceed three hundred (300) feet (91.4 m). (Ord. 18239 §62; September 15, 2003).

### 24.12.315 Section 804.1 Amended; Indirect Waste Receptors.

Section 804.1 of the Uniform Plumbing Code is amended to read as follows:

**804.1** All plumbing fixtures or other receptors receiving the discharge of indirect waste pipes shall be approved for the use proposed and shall be of such shape and capacity as to prevent splashing or flooding and shall be located where they are readily accessible for inspection and cleaning. No standpipe

receptor for any clothes washer shall extend more than thirty (30) inches (762 mm), nor less than eighteen (18) inches (457 mm) above its trap. No indirect waste receptor shall be installed in any toilet room, closet, cupboard, or storeroom, nor in any other portion of a building not in general use by the occupants thereof; except stand pipes for clothes washers may be installed in toilet and bathroom areas when the clothes washer is installed in the same room. (Ord. 18239 §63; September 15, 2003).

# 24.12.320 Section 807.4 Deleted; Indirect Wastes; Appliances.

Section 807.4 of the Uniform Plumbing Code is hereby deleted. (Ord. 18239 §64; September 15, 2003).

# 24.12.325 Section 810.2 Amended; Steam and Hot Water Drainage Condensers and Sumps.

Section 810.2 of the Uniform Plumbing Code is amended to read as follows:

**810.2** Sumps, condensers, or intercepting tanks which are constructed of concrete shall have walls and bottom not less than four (4) inches (102 mm) in thickness, and the inside shall be cement plastered not less than one-half (1/2) inch (12.7 mm) in thickness. Condensers constructed of metal shall be not less than No. 12 U.S. Standard gauge (0.109 inch) (2.77 mm) and all such metal condensers shall be protected from external corrosion by an approved bituminous coating.

EXCEPTION: Type 3 or greater RCP shall be approved. (Ord. 18239 §65; September 15, 2003).

# 24.12.330 Section 901.0 Amended; Vents Required.

Section 901 of the Uniform Plumbing Code is amended to read as follows:

**901.0 Vents Required.** Each plumbing fixture trap, except as otherwise provided in this Code, shall be protected against siphonage and back-pressure, and air circulation shall be assured throughout all parts of the drainage system by means of vent pipes installed in accordance with the requirements of this chapter and as otherwise required by this Code.

EXCEPTION: Permitted Floor Drains. Two floor drains and one automatic washer drain or one floor drain, one shower drain, and one automatic washer drain may be installed unvented in a building and /or residential unit, provided that the branch is connected at least four feet from the base of any soil stack and all fixtures are located in the building drain fixture level.(Ord. 18239 §66; September 15, 2003).

#### 24.12.335 Section 903.0 Amended; Vents; Materials.

Section 903.0 of the Uniform Plumbing Code is amended to read as follows:

#### 903.0 Materials.

- **903.1** Vent pipe shall be cast iron, galvanized steel, galvanized wrought iron, copper, brass, Schedule 40 PVC DWV or other approved materials having a smooth and uniform bore except that:
- **903.1.1** No galvanized wrought iron or galvanized steel pipe shall be used underground and shall be kept at least six (6) inches (152 mm) above ground.
- **903.1.2** PVC DWV piping installations shall be installed in accordance with IS 5, IS 9 and Chapter 15 "Firestop Protection for DWV and Storm water Application". Except for individual single family dwelling units, materials exposed within ducts or plenums shall have a flame-spread index of not more than 50, when tested in accordance with the Test

for Surface -Burning Characteristics of the Building Materials (See the Building Code standards based on ASTM E-84 and ANSI/UL 723.). (Ord. 18239 §67; September 15, 2003).

# 24.12.340 Section 903.2.1 Amended; Use of Copper Tubing.

Section 903.2.1 of the Uniform Plumbing Code is amended to read as follows:

**903.2.1** Copper tube for underground drainage and vent piping shall have a weight of not less than that of copper drainage tube type L. (Ord. 18239 §68; September 15, 2003).

# 24.12.345 Section 903.3 Amended; Vent Fittings.

Section 903.3 of the Uniform Plumbing Code is amended to read as follows:

**903.3** Vent fittings shall be cast iron, galvanized malleable iron or galvanized steel, copper, brass, PVC, or other approved materials, except that no galvanized malleable iron or galvanized steel fittings shall be used underground and shall be kept at least six (6) inches (152 mm) above ground. (Ord. 18239 §69; September 15, 2003).

#### 24.12.350 Section 904.1 Amended; Size of Vents.

Section 904.1 of the Uniform Plumbing Code is amended to read as follows:

**904.1** The size of vent piping shall be determined from its length and the total number of fixture units connected thereto, as set forth in Table 7-5. The diameter of an individual vent shall not be less than one and one-fourth (1-1/4) inches (32 mm) nor less than one-half (1/2) the diameter of the drain to which it is connected. In addition, the drainage piping of each building and each connection to a public sewer or a private sewage disposal system shall be vented by means of one or more vent pipes, the aggregate cross-sectional area of which shall not be less than that of the largest required building sewer, as determined from Table 7-5.

EXCEPTION: Minimum Size of Stack Vent or Vent Stack. Any structure in which a building drain is installed shall have at least one stack vent or vent stack not less than three inches in diameter. (Ord. 18239 §70; September 15, 2003).

#### 24.12.355 Section 905.7 Added; Two-inch Minimum Vent.

Section 905.7 is added to the Uniform Plumbing Code to read as follows:

**905.7 Two-inch Minimum Vent.** Any sanitary drainage system which has a house drain low enough to install fixtures on the lower level shall have two inch (minimum) vent extended below the first floor level where it shall be connected back into the drainage system.(Ord. 18239 §71; September 15, 2003).

# 24.12.360 Section 906.6 Amended; Vents; Lead.

Section 906.6 of the Uniform Plumbing Code is amended to read as follows:

**906.6** See Table 14-1. Sheet lead shall be not less than the following:

For safe pans – not less than 2 1/2 pounds per square foot or 1/16 inch (1.6 mm) thick.

For flashings or vent terminals – not less than 2 1/2 pounds per square foot or 1.2 mm thick.

Lead bends and lead traps shall not be less than one-eighth (1/8) inch (3.2 mm) wall thickness. (Ord. 18239 §72; September 15, 2003).

# 24.12.365 Section 906.7 Amended; Frost or Snow Closure.

Section 906.7 of the Uniform Plumbing Code is amended to read as follows:

**906.7 Frost or Snow Closure.** Where frost or snow closure is likely to occur in locations having minimum design temperature below 0°F (-17.8°C), vent terminals shall be a minimum of three (3) inches (76.5mm) in diameter but in no event smaller than the required vent pipe. The change in diameter shall be made inside the building at least one (1) foot (305 mm) below the roof in an insulated space and terminate not less than ten (10) inches (254 mm) above the roof, or as required by the Administrative Authority. (Ord. 18239 §73; September 15, 2003).

#### 24.12.370 Section 909.0 Amended; Special Venting for Island Fixtures.

Section 909.0 of the Uniform Plumbing Code is amended to read as follows:

909.0 Special Venting for Island Fixtures. Traps for island sinks and similar equipment shall be roughed in above the floor and may be vented by extending the vent as high as possible, but not less than the drainboard height and then returning it downward and connecting it to the horizontal sink drain immediately downstream from the vertical fixture drain. The return vent shall be connected to the horizontal drain through a wye-branch fitting and shall, in addition, be provided with a foot vent taken off the vertical fixture vent by means of a wye-branch immediately below the floor and extending to the nearest partition and then through the roof to the open air or may be connected to other vents at a point not less than six (6) inches (152 mm) above the flood level rim of the fixtures served. Drainage fittings shall be used on all parts of the vent below the floor level and a minimum slope of one-quarter (1/4) inch per foot (20.9 mm/m) back to the drain shall be maintained. The return bend used under the drainboard shall be a one (1) piece fitting or an assembly of a forty-five (45) degree (0.79 rad), a ninety (90) degree (1.6 rad) and a forty-five (45) degree (0.79 rad) elbow in the order named. Pipe sizing shall be as elsewhere required in this Code. The island sink drain, upstream of the returned vent, shall serve no other fixtures. An accessible cleanout shall be installed in the vertical portion of the foot vent. or connection between the outlet of a plumbing fixture and the trap therefor. Such tailpieces or connections shall be as short as possible, and in no case shall exceed two (2) feet (610 mm).

EXCEPTION: The foot vent may be eliminated if pipe is one pipe size larger than required. (Ord. 18239 §74; September 15, 2003).

# 24.12.375 Section 1001.3 Amended; Traps Required.

Section 1001.3 of the Uniform Plumbing Code is amended to read as follows:

1001.3 No food waste disposal unit shall be installed with any set of restaurant, commercial, or industrial sinks served by a single trap; each such food waste disposal unit shall be connected to a separate trap. Each domestic clothes washer and each laundry tub shall be connected to a separate and independent trap; except that a trap serving a laundry tub may also receive the waste from a clothes washer set adjacent thereto. No clothes washer or laundry tub shall be connected to any trap for a kitchen sink. Connection

of laundry tray waste line in a single dwelling unit may be made into the stand-pipe for the automatic clothes washer drain. (Ord. 18239 §75; September 15, 2003).

# 24.12.380 Section 1101.3 Amended; Storm Drainage; Material Uses.

Section 1101.3 of the Uniform Plumbing Code is amended to read as follows:

1101.3 Rainwater piping placed within the interior of a building or run within a vent or shaft shall be of cast iron, galvanized steel, wrought iron, brass, copper, lead, Schedule 40 PVC DWV, or other approved materials, and changes in direction shall conform to the requirements of Section 706.0. and PVC DWV piping installations shall be installed in accordance with IS 5, IS 9 and Chapter 15 "Fire stop Protection for DWV and Storm water Application". Except for individual single family dwelling units, materials exposed within ducts or plenums shall have a flame-spread index of not more then 25 and a smoke-developed index of not more than 50, when tested in accordance with the Test for Surface -Burning Characteristics of the Building Materials (See the Building Code standards based on ASTM E-84 and ANSI/UL 723). (Ord. 18239 §76; September 15, 2003).

# 24.12.385 Sections 1101.5 through 1101.10 Deleted; Subsoil Drains.

Sections 1101.5 through 1101.10 of the Uniform Plumbing Code are hereby deleted. (Ord. 18239 §77; September 15, 2003).

# 24.12.390 Section 1102.1.2 Amended; Conductors.

Section 1102.1.2 of the Uniform Plumbing Code is amended to read as follows:

**1102.1.2** The inside of conductors installed above ground level shall be of seamless copper water tube, Type K, L or M; Schedule 40 copper pipe or Schedule 40 copper alloy pipe; Type DWV copper drainage tube; service weight cast iron soil pipe or hubbess cast iron soil pipe; standard weight galvanized steel pipe; or Schedule 40 PVC plastic pipe. (Ord. 18239 §78; September 15, 2003).

#### **24.12.395** Section 1102.2.2 Amended; Leaders.

Section 1102.2.2 of the Uniform Plumbing Code is amended to read as follows:

1102.2.2 Leaders shall be of seamless copper water tube, Type K, L or M; Schedule 40 copper pipe; Schedule 40 copper alloy pipe; type DWV copper drainage tube; service weight cast iron soil pipe or hubless cast iron soil pipe; aluminum sheet metal, galvanized steel sheet metal or copper sheet metal; standard weight galvanized steel pipe; or Schedule 40 PVC plastic pipe. (Ord. 18239 §79; September 15, 2003).

#### 24.12.400 Section 1102.5 Deleted; Subsoil Drains.

Section 1102.5 of the Uniform Plumbing Code and all subsections thereof are hereby deleted. (Ord. 18239 §80; September 15, 2003).

#### 24.12.405 Section 1103.0 Deleted; Traps on Storm Drains and Leaders.

Section 1103.0 of the Uniform Plumbing Code and all subsections thereof are hereby deleted. (Ord. 18239 §81; September 15, 2003).

# 24.12.410 Section 1104.3 Deleted; Combining Storm with Sanitary Drainage.

Section 1104.3 of the Uniform Plumbing Code is hereby deleted. (Ord. 18239 §82; September 15, 2003).

# 24.12.415 Table 11-1 Amended; Sizing Roof Drains, Leaders, and Vertical Rainwater Piping.

Table 11-1 of the Uniform Plumbing Code is amended to read as follows:

TABLE 11-1
Sizing Roof Drains, Leaders, and Vertical Rainwater Piping

Size of Drain, Leader or Pipe, Inches	Flow, gpm	Maximum Allowable Horizontal Projected Roof Areas Square Feet at Various Rainfall Rates
		6"/hr
2	23	363
3	67	1073
4	144	2307
5	261	4187
6	424	6800
8	913	14,667

TABLE 11-1 (Metric)
Sizing Roof Drains, Leaders, and Vertical Rainwater Piping

Size of Drain Leader or Pipe,	Flow,	Maximum Allowable Horizontal Projected Roof Areas
mm	L/s	Square Meters at Various Rainfall Rates
		150mm/hr
50	1.5	34
80	4.2	100
100	9.1	214
125	16.5	389
150	26.8	632
200	57.6	1363

#### Notes

- 1. The sizing data for vertical conductors, leaders, and drains is based on the pipes flowing 7/24 full.
- 2. For rainfall rates other than those listed, determine the allowable roof area by dividing the area given in the 1 inch/hour (25 mm/hour) column by the desired rainfall rate.
- 3. Vertical piping may be round, square, or rectangular. Square pipe shall be sized to enclose its equivalent round pipe. Rectangular pipe shall have at least the same cross-sectional area as its equivalent round pipe, except that the ratio of its side dimensions shall not exceed 3 to 1.

(Ord. 18239 §83; September 15, 2003).

#### 24.12.420 Table 11-3 Deleted; Size of Gutters.

Table 11-3 of the Uniform Plumbing Code is hereby deleted. (Ord. 18239 §84; September 15, 2003).

## 24.12.425 Section 1105.4.1 Amended; Roof Drain Flashings.

Section 1105.4.1 of the Uniform Plumbing Code is amended to read as follows:

**1105.4.1** Where lead flashing material is used, it shall be a minimum of 2 1/2 pounds per square foot. (Ord. 18239 §85; September 15, 2003).

## 24.12.430 Section 1106.3 Deleted; Size of Roof Gutters.

Section 1106.3 of the Uniform Plumbing Code is hereby deleted. (Ord. 18239 §86; September 15, 2003).

## 24.12.435 Section 1106.4 Deleted; Side Walls Draining onto a Roof.

Section 1106.4 of the Uniform Plumbing Code is hereby deleted. (Ord. 18239 §87; September 15, 2003).

## 24.12.440 Chapter 16 Added; Water Conditioning Installations and Contractors.

The Uniform Plumbing Code is amended by adding a new Chapter 16 to read as follows:

#### **CHAPTER 16**

## WATER CONDITIONING INSTALLATIONS AND CONTRACTORS

**1601.0 General Provisions.** The provisions of this chapter shall control the design and installation, alteration, removal, or repair of water conditioning equipment, the registration of water conditioning contractors, and the issuance of permits and collection of fees therefor.

## **1602.0 Definitions.** For the purpose of this chapter, the following definitions shall apply:

- (1) Water conditioning appliance shall mean apparatus and equipment connected to a water supply other than by hose connections to existing faucets and designed to soften or filter or change the mineral content of water.
- (2) Water conditioning installation shall mean only work incidental to the complete installation, repair, replacement, relocation, or removal of water conditioning appliances, including piping to hot and cold water lines for such purposes.

#### 1603.0 Permits and Fees.

- **1603.1** It shall be unlawful for any person to install, alter, remove, or repair any water conditioning appliance, or cause the same to be done, without first obtaining a permit therefor from the Administrative Authority. No permit shall be required for minor repair work. Minor repair work is defined as repairing leaks in pipes, cleaning out supply or waste lines, or repairing a water conditioning appliance.
- 1603.2 A permit to install a water conditioning appliance may be issued only to a duly registered water conditioning contractor or registered master plumber contractor or homeowner complying with Section 24.12.025. It shall be unlawful for any person, firm, or corporation to cause or permit any water conditioning installation to be done on any property owned, managed, or controlled by such person, firm, or corporation unless such work is done by said duly registered water conditioning contractor or registered master plumber contractor.

**1603.3** Application for a permit may be made in writing to the Administrative Authority on a form furnished by the Administrative Authority for that purpose.

A fee shall be paid to the Administrative Authority as follows:

For each water conditioning installation . . . . . . . . \$10.00

Reinspection fee (wrong address, work

that does not pass inspection, work not complete, inaccessibility) ..........\$15.00

On and after January 1, 2004, the reinspection fee under this section shall increase to \$25.00.

1603.3.1 A permit may be obtained online through the Administrative Authority's electronic permit application form. The Administrative Authority shall establish and maintain written procedures and requirements for issuing the master plumber contractor or water conditioning contractor a unique personal identification number to be used in combination with an authenticated personal computer under the exclusive control of the master plumber contractor or water conditioning contractor. The written procedures shall list the acceptable verification or authentication services, payment and use of which shall be the sole responsibility of the master plumber contractor or water conditioning contractor. If a permit is applied for electronically, the applicant shall affix a signature by use of a digital or electronic signature that complies with the requirements of state law. The use of a digital or electronic signature shall have the same force and effect as the use of a manual signature and the master plumber contractor or water conditioning contractor shall be responsible for all aspects of the proper use or misuse of either the electronic signature or the unique personal identification number.

**1603.4** Water shall not be turned on to any water conditioning appliance until it has been inspected and approved by the Administrative Authority.

## 1604.0 Installation and Inspection.

**1604.1** Installation and Inspection. The water piping to any water conditioning appliance shall be of materials and methods of installation approved for water distribution in this code. Piping from any water conditioning appliance to the city sewer system shall be of any material approved by the Administrative Authority.

1604.2 All water conditioning installations shall be inspected by the Administrative Authority to ensure compliance with all the requirements of this code. It shall be the duty of the person doing the work authorized by the permit to notify the Administrative Authority orally or in writing that said work is ready for inspection, and for said person doing the work to provide access and means for proper inspection. It shall be the duty of the person doing the work to call for inspection of the water conditioning installation not later than three days after the completion of the installation.

## 1605.0 Water Conditioning Board of Examiners.

**1605.1 Creation.** There is hereby created a Water Conditioning Board of Examiners (hereinafter referred to as the "Examining Board") which shall consist of one water conditioning contractor and four members of the Examining Board for Plumbers as follows: The Administrative Authority, a registered professional engineer, a registered master plumber contractor and the chief plumbing inspector. Said professional engineer and master plumber contractor shall serve on the Water Conditioning Board of

Examiners concurrently with their terms on the Examining Board for Plumbers. The water conditioning contractor shall be appointed by the Mayor with the concurrence of the City Council for a term of three years to run concurrently with the term of the professional engineer member. Vacancies shall be filled by appointment for the unexpired term only. The Chief Plumbing Inspector shall be the Permanent Secretary of the Examining Board and shall keep a record of all meetings. The water conditioning contractor member of the Examining Board shall be associated with a business devoted solely to water conditioning appliance installations.

1605.2 The Examining Board shall have authority to adopt such rules and regulations as are consistent with the provisions of this code, subject to approval of the Mayor, for the examination of applicants for registration under the terms of this code. All decisions of the Examining Board shall be subject to review by the Mayor upon written request by an aggrieved party to the Mayor. The Examining Board shall determine the character of the examination to be given applicants for registration and shall elect annually a chairman who shall preside at all meetings.

1605.3 The Examining Board shall meet concurrently with the Examining Board of Plumbers.1606.0 Registration of Water Conditioning Contractors and Installers.

**1606.1** All persons installing water conditioning appliances shall be registered as water conditioning contractors or shall be registered as water conditioning installers. All water conditioning installers must be employed by a registered water conditioning contractor.

**1606.2** Application for registration as a water conditioning contractor or water conditioning installer shall be made to the Administrative Authority on a form furnished by him for such purpose. Such form shall require the name and address of the applicant, the business location of the applicant, a statement of the practical experience of the applicant, and such other relevant information as may be required by the Administrative Authority.

1606.3 Any corporation may be registered as a water conditioning contractor in the name of such corporation; provided, such corporation shall have a registered water conditioning contractor as a bona fide officer or employee of such corporation and who shall at all times be in actual charge of water conditioning work done by such corporation. The registration certificate shall also be issued in the name of the person registered as a water conditioning contractor. In the event such water conditioning contractor shall sever his relationship with such corporation as a bona fide officer or employee, he must immediately notify the Administrative Authority, who shall forthwith recommend to the Examining Board that the certificate of registration of such corporation be revoked. It shall be unlawful for any corporation to act, engage in, advertise, or to otherwise represent itself as a water conditioning contractor in the City of Lincoln unless a bona fide officer or employee of such corporation is duly registered as a water conditioning contractor as provided in this chapter.

**1606.4** Any firm or partnership may be registered as a water conditioning contractor in the name of such firm or partnership, provided such firm or partnership shall have a registered water conditioning contractor as a bona fide employee or partner of such firm or partnership and who shall at all times be in actual charge of the water conditioning work done by such firm or partnership. The registration certificate shall also be issued in the name of the person registered as the water conditioning contractor. In the event such water conditioning contractor shall sever his relationship with such firm or partnership as a bona fide employee or partner, he must immediately notify the Administrative Authority and the Examining

Board who shall forthwith recommend to the Mayor that the certificate of registration of such firm or partnership be revoked. It shall be unlawful for any firm or partnership to act, engage in, advertise or otherwise represent themselves as a water conditioning contractor in the City of Lincoln, unless a bona fide member or employee of such firm or partnership is duly registered as a water conditioning contractor as provided in this chapter.

**1606.5** Application for registration as a water conditioning installer may be made to the Administrative Authority. Before a registration certificate shall be issued, the applicant shall be required to submit to and pass a written examination to determine his qualifications and fitness for executing the class of work covered by the registration. Such examination shall be given under the direction of the Examining Board. Any applicant who fails to pass the required examination shall not be eligible to take another examination until at least six months shall have elapsed from the date of last examination.

## 1607.0 Examination and Registration Fees.

**1607.1** Each applicant for a new registration shall pay to the Administrative Authority an examination fee of \$30.00.

Upon initial issuance or subsequent renewal of a registration certificate, annual registration fees shall be paid as follows:

Water conditioning contractor registration fee . . . . . . . \$25.00 Water conditioning installer registration fee . . . . . . . \$10.00

On and after January 1, 2004, each applicant for a new registration shall pay to the Administrative Authority an examination fee of \$50.00.

On and after January 1, 2004, upon initial issuance or subsequent renewal of a registration certificate, annual registration fees shall be paid as follows:

Water conditioning contractor registration fee ........\$50.00 Water conditioning installer registration fee ........\$20.00

1607.2 All registrations provided by this section shall expire on the thirty-first day of May following the date of issuance thereof, and shall not be assignable. Any person registered under the provisions of this code as a Water conditioning contractor or installer who does not renew his certificate of registration within a period of sixty days after the expiration of same shall pay the examination fee required by this code for a water conditioner or a water conditioning installer, as the case may be, and shall submit himself to and pass the regularly scheduled examination given by the Examining Board before such person can be again registered hereunder.

1607.3 Any person registered under the provisions of this code as a water conditioning contractor or a water conditioning installer who does not renew his certificate of registration within a period of sixty days after the expiration of same shall pay the examination fee required by this code and shall submit himself to and pass the regularly scheduled written examination given by the Examining Board before such person can be again registered hereunder.

1607.4 All registered water conditioning contractors or installers duly registered at the time of the adoption of this code shall be automatically registered in their appropriate classification without submitting to an examination.

- **1608.0 Certificate of Insurance.** Before any water conditioning contractor may be issued a permit or registered under the provisions of this chapter, such contractor shall have a regularly established place of business, and shall be required to:
- (1) At all times maintain public liability insurance coverage for all claims arising out of all work in the City of Lincoln and within three miles of the corporate limits thereof done by or under the supervision of the water conditioning contractor under the provisions of this code. Such insurance shall be in the form of a commercial or comprehensive general liability policy, or an acceptable substitute policy form as permitted by the City Attorney, with a minimum combined single limit of \$500,000.00 aggregate for any one occurrence on any job for which a permit is required under this code, provided the City of Lincoln shall be named an additional insured thereunder. The coverages required herein shall be subject to review and approval by the City Attorney for conformance with the provisions of this section.
- (2) At all times keep on file with the Administrative Authority a current certificate of insurance signed by a qualified agent of an insurance company licensed to do business in the State of Nebraska and approved by the City Attorney for conformance with the provisions of this section evidencing the existence of valid and effective policies of insurance naming the city as an additional insured for the coverage required by subsection (1) of this section, the limits of each policy, the policy number, the name of the insurer, the effective date and expiration date of each policy, the deductibles or self-insurance retainers of each policy, and a copy of an endorsement placed on each policy requiring thirty days notice by mail to the Administrative Authority before the insurer may cancel the policy for any reason, and upon request of the Administrative Authority or the City Attorney, a copy of any endorsements placed on such policies or the declarations page of such policies. Any termination, reduction, or lapse of such insurance shall automatically terminate the privilege of the water conditioning contractor to be issued permits under the provisions of this code, unless other insurance meeting the requirements of this section is provided and in full force and effect at the time of such termination or cancellation.

## 1609.0 Suspension or Revocation of Registration.

**1609.1** The Mayor, upon the recommendation of the Administrative Authority and after a report of the Examining Board and hearing as hereinafter provided, may revoke any registration of a water conditioning contractor if the same was obtained by error or fraud, or if the holder thereof is shown to be no longer qualified, or if such holder fails, neglects, or refuses to comply with the provisions of this chapter.

1609.2 If suspension or revocation of a water conditioning certificate of registration is recommended and the Examining Board has submitted a written report affirming such recommendation, the Mayor shall cause written notice to be served upon the water conditioning contractor or installer whose registration is recommended for suspension or revocation, setting forth a time and place for a public hearing. Upon the conclusion of such hearing, the Mayor shall, within thirty days thereafter, render a written decision to such water conditioning contractor or installer regarding suspension or revocation of his registration. Such written decision shall be served by mailing it to such water conditioning contractor by certified mail at his last known business address or by personal service. If a certificate of registration is revoked, the holder of the same shall not apply for a registration until one year after the date of such revocation. Decisions of the Mayor concerning suspension or revocation of registration may be appealed as provided by law.

**1609.3** It shall be unlawful for any registered water conditioning contractor to allow his name to be used by another person, directly or indirectly, to obtain a permit for the installation, alteration, or repair of any water conditioning equipment. Violation of the foregoing provision shall be sufficient grounds for suspension or revocation of the registration provided in this chapter. (Ord. 18239 §88; September 15, 2003).

## 24.12.445 Chapter 17 Added; Excavations in Streets, Alleys, or Public Rights-of-Way.

The Uniform Plumbing Code is amended by adding a new Chapter 17 to read as follows:

## **CHAPTER 17**

## **EXCAVATIONS IN STREETS, ALLEYS, OR PUBLIC RIGHTS-OF-WAY**

**1701.0 Permit to Excavate.** It shall be unlawful for any person, firm, or corporation, other than duly authorized employees of the City of Lincoln, to make any opening, cut, trench, or excavation in or under the surface of any street, alley, sidewalk, highway, or public property of the City of Lincoln without first obtaining a written permit to do so from the Department of Building and Safety of the City of Lincoln.

## 1702.0 Excavations, Lights, and Barricades.

1702.1 All trenches and excavations in the public way shall be excavated in such a manner as to impede public travel as little as possible. No excavations shall be made within two feet of any public sewer or water main by means of a mechanical digging machine. Gutter crossings and all other ways shall be kept in such condition at all times that water will readily escape and drain from the premises. Plank walkways of sufficient width and strength to provide safe passageway for pedestrians shall be provided where sidewalks or crossings are removed or interrupted, and over all trenches and excavations.

1702.2 Lighted flares or lights adequate in number shall be placed and maintained around all unfinished work between the hours of sunset and sunrise, and sufficient barricades against accidents shall be placed around excavations by the permittee at all times.

## 1703.0 Refilling Excavations.

1703.1 The opening and refilling of all cuts, trenches, and excavations in the public way shall be done under the direction and control of the Director of Public Works and Utilities. All excavations shall be adequately refilled with material acceptable to the Director of Public Works and Utilities and in such a manner that settling will not occur. Refilling shall not be done with cinders, broken concrete, or other debris, nor with frozen earth, nor when the material already in the excavation is frozen, nor when the walls of the trench or excavation are frozen. All refills shall be firmly compacted by mechanical tampers.

1703.2 All cuts, trenches, or excavations in, through, or under pavement or sidewalks, or any gravel or crushed stone road surface shall be filled and the pavement or surface replaced by the city, and the city shall assume and be responsible for maintaining such replaced surface. All other cuts, trenches, or excavations shall be refilled by the permittee making same, who shall be liable for any damage resulting from settling which occurs within two years after the refill is made.

1703.3 The placing of pipes through bore holes made with augers or boring machines under pavement, sidewalk, gravel, or crushed stone road surfaces shall be subject to the direction and control of the Director of Public Works and Utilities.

1704.0 Restoration of Surface. The permittee, upon completion of the excavation and refilling, shall remove all material, excess dirt, and debris and the parking area and sidewalk space shall be leveled and raked smooth. All sod which has been removed or damaged by reason of such excavation and refill shall be replaced or resodded with new sod, and any newly seeded areas shall be properly reseeded. Care shall be exercised throughout all operations to avoid damage to trees or shrubbery in the street space and adjacent areas, and permittee shall be liable for any damage that may occur to such trees and shrubbery, and at the option of the city or the adjoining property owner shall replace the damaged trees or shrubbery or pay such damages. Gravel or crushed stone roadways, driveways, or areas damaged or destroyed shall be restored with like material.

**1705.0 Refilling Excavations; Private Property.** The permittee shall be responsible for refilling and firmly compacting the sewer and water excavations so there will be no settling for two years. (Ord. 18239 §89; September 15, 2003).

## 24.12.450 Chapter 18 Added; Underground Irrigation System.

The Uniform Plumbing Code is amended by adding a new Chapter 18 to read as follows:

## CHAPTER 18 UNDERGROUND IRRIGATION SYSTEM

- **1801.0 General Provisions.** The provisions of this chapter shall control the design and installation of all underground irrigation systems. Irrigation system shall mean a permanently installed watering system, either manual or automatic, used for the watering of lawn turf, gardens, flowers, and similar types of plantings.
- **1802.0** Irrigation System Contractor; Definition. Irrigation system contractor shall mean anyone engaging in the installation of an irrigation system at a location other than their own personal residence.
- **1803.0 Permit Required.** It shall be unlawful for any person to construct or install any underground irrigation system without first having obtained permits therefor as hereinafter required. Any person who shall construct or install an underground irrigation system without first having obtained the required permits shall pay permit fees which are twice the amount of the applicable fees hereinafter prescribed, and such person shall not in any way be relieved from complying with all of the provisions of law applicable to the construction and installation of underground irrigation systems.
- 1804.0 Application for Permit. Application shall be made to the Administrative Authority for a permit for the installation of any underground irrigation system. All such applications when required by the Administrative Authority shall be accompanied by plans and specifications in duplicate and in sufficient detail to show clearly the underground supply piping, pipe sizes, depth of pipes below ground surface, location of valves, backflow preventer devices, adjacent curbs, sidewalks, property lines, and such other data as may be pertinent to the installation. Said plans shall show in particular all piping that is proposed to be located in the public right-of-way, and such piping may be permitted, provided, however, that such permission and the issuance of a permit for the installation of an underground irrigation system wholly or partly in the public right-of-way shall be granted as a privilege. Said plans shall further show in detail the location of the water meter in relation to the water service and the location at which the underground irri-

gation system is connected to the water service pipe, and a diagram locating all heads, valves, shut offs, drains, and distribution pipes.

1805.0 Permit to Install Water Supply Piping from Water System. A permit to install new or replacement water supply piping from the public water supply system to and including the reduced pressure backflow preventer, or pressure vacuum breakers, as the case may be, shall be issued only to a registered master plumber contractor or homeowner complying with Section 24.12.025, 401.1 through 401.2, who shall be required to make application and pay fees as prescribed elsewhere in this code. Said plumber or homeowner shall call for inspections and be responsible for code compliance for his portion of the work. The irrigation contractor has the responsibility for the location and coordinating the proper installation of the backflow prevention device in relation to the irrigation system installation downstream from the backflow device.

**1806.0 Permit to Install Irrigation System.** A permit to install all water piping downstream of the backflow devices shall be issued to an irrigation contractor or homeowner complying with Section 24.12.025, 401.1 through 401.2. Application by the contractor shall also indicate the name of the registered master plumber contractor who will install the backflow prevention device. The irrigation contractor shall be required to make the permit application and pay the fees prescribed below. He shall call for inspections and be responsible for the work to be installed as shown on the plans approved by the Administrative Authority. No inspection or permit is required for the repair of existing irrigation systems downstream from the backflow prevention device.

**1807.0 Fees.** The required fee for each underground irrigation system shall be included with each permit application filed with the Administrative Authority. A permit fee shall be paid based upon the size of backflow devices installed in the irrigation system as set forth below.

### PERMIT FEES

SIZE OF BACKFLOW DEVICE	AMOUNT PER DEVICE
One inch and smaller	\$ 20.00
One and one-fourth and one and one-half inch	35.00
Two inch	50.00
Three inch or larger	100.00
Additions to existing systems	10.00

## 1808.0 Installation.

1808.1 Underground irrigation systems when connected to a potable water supply or public water supply system shall be installed in accordance with these regulations. Underground irrigation systems shall be equipped with one or more pressure-type vacuum breakers or a reduced pressure backflow preventer to prevent back-siphonage or backflow. Pressure-type vacuum breakers and reduced pressure backflow preventers shall be of the type approved by the Lincoln Water System. The pressure vacuum

breakers shall be installed not less than twelve inches above the highest underground sprinkler head and in no event less than twelve inches above the highest point of elevation of the surrounding front, rear, and/or side yard ground of the property being served.

**1808.2** The potable water piping within the building and/or including the back-siphonage or backflow device or devices shall be of materials approved for water distribution in this code. Water piping within the underground irrigation system protected by backflow devices above described may be of any material approved by the Administrative Authority, including approved plastic piping. All irrigation system piping installed above ground shall be approved metallic pipe or approved plastic pipe protected from physical damage and sunlight.

**1808.3** Electrically controlled irrigation systems shall be connected in accordance with the Lincoln Electrical Code. The control cabinet shall be wired direct or connected to a permanently installed grounded receptacle within six feet of the controller and with a three wire cord not exceeding six feet in length and approved for heavy duty use.

**1808.4** Underground irrigation system installations shall be inspected by the Administrative Authority to ensure compliance with the requirements of this code and with Chapter 14.92 of the Lincoln Municipal Code. It shall be the duty of the person doing the work authorized by the permit to notify the Administrative Authority orally or in writing that said work is ready for inspection, and for said person doing the work to provide access and means for proper inspection. It shall be the duty of the person doing the work to call for inspection of the irrigation system installation not later than three days after the completion of the installation.

**1808.5** The initial and any required subsequent inspection, testing, and repair of the backflow prevention devices shall be administered by the Lincoln Water System in accordance with Title 17, Section 17.18.080 of the Lincoln Municipal Code.

### 1809.0 Certificate of Insurance.

**1809.1** Before any irrigation system contractor may be issued a permit under the provisions of this code, such contractor shall be required to:

- (1) At all times maintain public liability insurance coverage for all claims arising out of all work in the City of Lincoln and within three miles of the corporate limits thereof done by or under the supervision of the irrigation system contractor under the provisions of this code. Such insurance shall be in the form of a commercial or comprehensive general liability policy, or an acceptable substitute policy form as permitted by the City Attorney, with a minimum combined single limit of \$500,000.00 aggregate for any one occurrence on any job for which a permit is required under this code, provided the City of Lincoln shall be named an additional insured thereunder. The coverages required herein shall be subject to review and approval by the City Attorney for conformance with the provisions of this section.
- (2) At all times keep on file with the Administrative Authority a current certificate of insurance signed by a qualified agent of an insurance company licensed to do business in the State of Nebraska and approved by the City Attorney for conformance with the provisions of this section evidencing the existence of valid and effective policies of insurance naming the city as an additional insured for the coverage required by subsection (1) of this section, the limits of each policy, the policy number, the name of the insurer, the effective date and expiration date of each policy, the deductibles or self-insurance retainers of each policy, and a copy of an endorsement placed on each policy requiring thirty days notice

by mail to the Administrative Authority before the insurer may cancel the policy for any reason, and upon request of the Administrative Authority or the City Attorney, a copy of any endorsements placed on such policies or the declarations page of such policies. Any termination, reduction, or lapse of such insurance shall automatically terminate the privilege of the irrigation system contractor to be issued permits under the provisions of this code, unless other insurance meeting the requirements of this section is provided and in full force and effect at the time of such termination or cancellation.

## 1810.0 Violations and Penalties.

**1810.1** Any person, firm, or corporation violating any of the provisions of this code shall be deemed guilty of a misdemeanor, and each such person shall be deemed guilty of a separate offense for each and every day or portion thereof during which any violation of any of the provisions of this code is committed, continued, or permitted; and upon conviction of any such violation, such person shall be punishable by a fine in any sum not to exceed \$500.00, or be imprisoned in the county jail for a period not to exceed six months, or both; except that each person so convicted shall be fined in a sum of not less than \$200.00 for the first offense, not less than \$250.00 for a second offense, and not less than \$300.00 for the third offense and each offense thereafter.

**1810.2** Any plumbing or drainage work or equipment which is installed, operated, or maintained in violation of this code is hereby declared to be a nuisance. (Ord. 18239 §90; September 15, 2003).

# 24.12.455 Appendix D, Table D-1, State of Nebraska, Amended; Sizing Stormwater Drainage Systems.

Appendix D, Table D-1, State of Nebraska, of the Uniform Plumbing Code is amended to read as follows:

TABLE D-1

Maximum Rates of Rainfall for Various Cities

States and Cities		Storm Drainage 60-Minute Duration, 100-Year Return	
	Inches/Hour	<b>GPM/Square Foot</b>	
NEBRASKA			
Omaha	3.6	0.037	
Lincoln	6.0	0.062	
North Platte	3.5	0.036	
Scottsbluff	2.8	0.029	

(Ord. 18239 §91; September 15, 2003).

## 24.12.460 Appendix E 9 Amended; M/H Lot Drainage Inlet and Lateral.

Appendix E 9 of the Uniform Plumbing Code is amended to read as follows:

## E 9 M/H Lot Drainage Inlet and Lateral.

- (a) Size. Each lot shall be provided with a drainage inlet not less than four (4) inches (102 mm) in diameter.
- (b) The lateral line from the inlet to the sewage drain line shall slope at least one-fourth (1/4) inch per foot (20.9 mm/m). All joints shall be watertight.
- (c) All materials used for drainage connections between a M/H and the lot drainage inlet shall be semi-rigid, corrosion resistant, non-absorbent and durable. The inner surface shall be smooth.
- (d) Provision shall be made for plugging or capping the sewage drain inlet when a M/H does not occupy the lot. Surface drainage shall be diverted away from the inlet. The rim of the inlet shall extend not more than four (4) inches (102 mm) above ground elevation. (Ord. 18239 §92; September 15, 2003).

## 24.12.465 Appendix E 11 Amended; Pipe Size.

Appendix E 11 of the Uniform Plumbing Code is amended to read as follows:

## E 11 Pipe Size

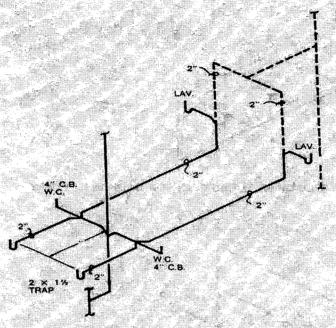
- (a) Each M/H lot drainage inlet shall be assigned a waste loading value of twelve (12) fixture units and each park drainage system shall be sized according to Table E-1 or as provided herein. Drainage laterals shall be not less than four (4) inches (102 mm) in diameter.
- (b) A park drainage system which exceeds the fixture unit loading of Table E-1 or in which the grade and slope of drainage pipe does not meet the minimum specified in Table E-2 shall be designed by a registered professional engineer. (Ord. 18239 §93; September 15, 2003).

## 24.12.470 Appendix L 7.0 Added; Alternate Plumbing System Drawings.

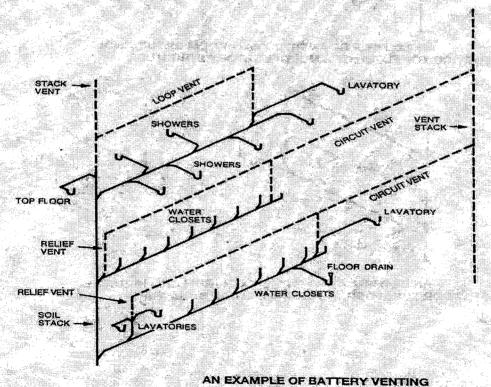
The Uniform Plumbing Code is amended by adding Appendix L 7.0 to read as follows:

## L 7.0 Alternate Plumbing System Drawings.

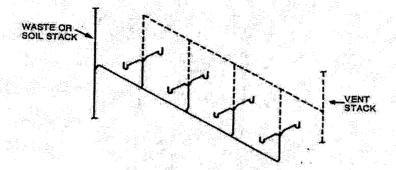
The following alternate plumbing system drawings are examples under the Uniform Plumbing Code: (*Drawings continued on next page*) (Ord. 18239 §94; September 15, 2003).



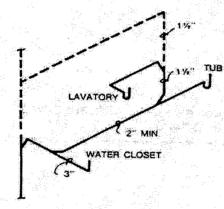
TYPICAL EXAMPLE OF 4" CLOSET BEND WITH TWO 2" WYE TAPS



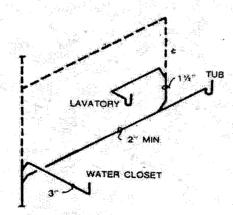
NOTE: ALL HORIZONTAL BRANCHES ARE UNIFORMLY SIZED.



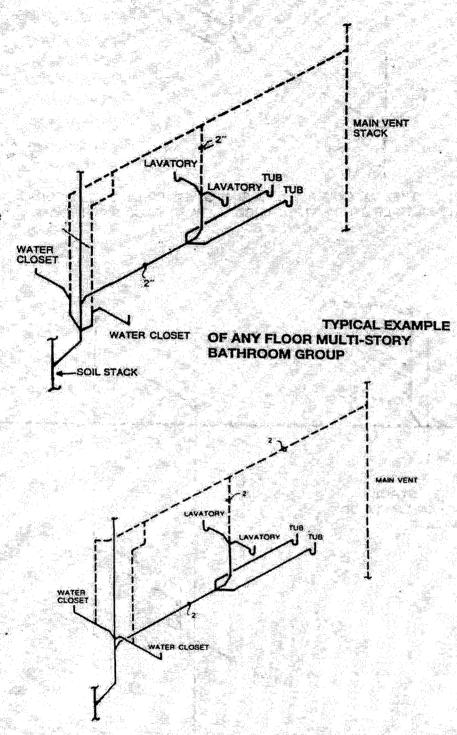
ONE EXAMPLE OF FIXTURES BACK-TO-BACK IN BATTERY



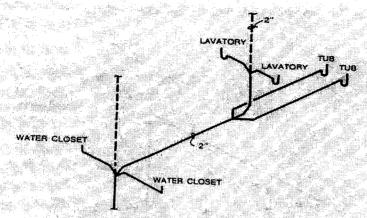
AN EXAMPLE OF A VENTED BATHROOM GROUP SINGLE STORY OR TOP FLOOR OF A MULTIPLE STORY STRUCTURE



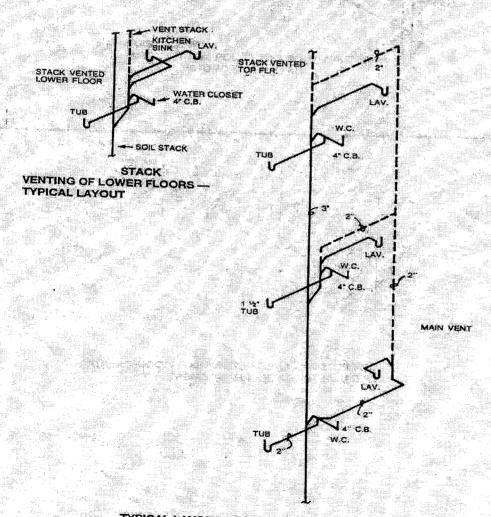
AN EXAMPLE OF A VENTED BATHROOM GROUP SINGLE STORY OR TOP FLOOR OF MULTIPLE STORY STRUCTURE



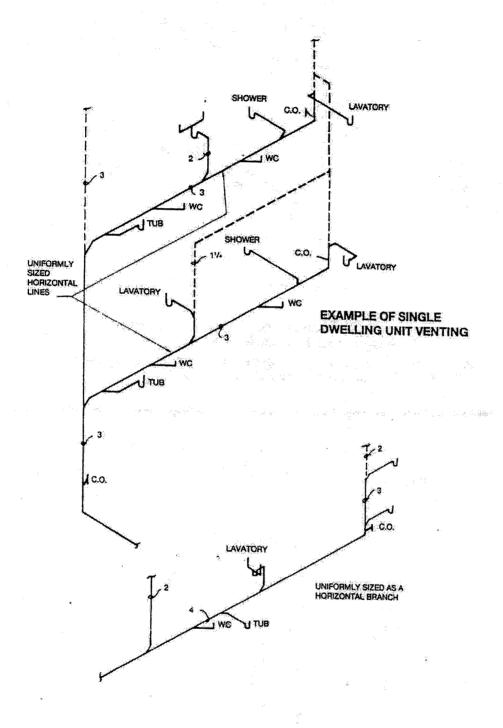
ANY FLOOR — MULTI-STORY BATHROOM GROUPS TYPICAL ALTERNATE ARRANGEMENT



TYPICAL EXAMPLE OF A SINGLE STORY OR TOP FLOOR ONLY OF A MULTIPLE STORY STRUCTURE BACK TO BACK BATHROOM GROUPS



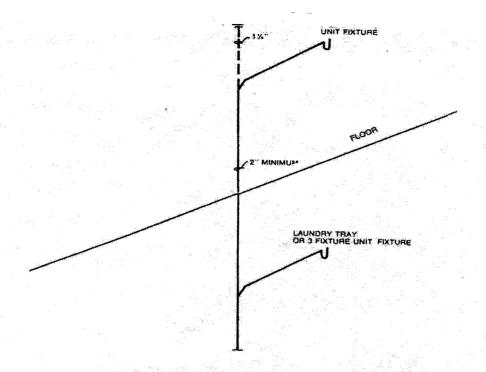
TYPICAL LAYOUT OF STACK VENTING LOWER FLOORS— WET VENTING ALSO SHOWN



## **EXAMPLE OF SINGLE DWELLING UNIT VENTING**

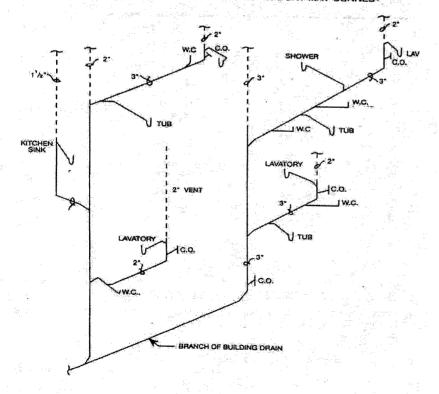
NOTE: VENT SIZING AS PER TABLE UNIFORMLY SIZED AS PER TABLE

HORIZONTAL BRANCH LINES SHALL BE

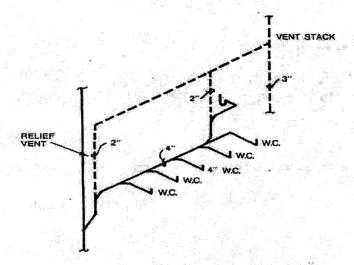


## TYPICAL EXAMPLE OF WASTE STACKS SERVING KITCHEN SINKS—SINGLE DWELLING ONLY

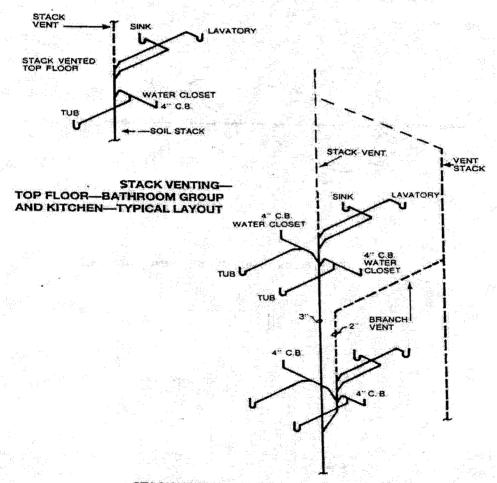
NOTE: NO KITCHEN SINK MAY BE INSTALLED ON A 2" WET VENT WHICH VENTS A WATER CLOSET. HOWEVER WASTES FROM A LAVATORY MAY CONNECT.



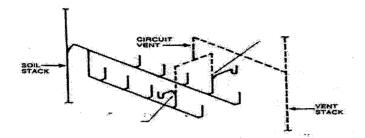
EXAMPLE OF SINGLE DWELLING UNIT VENTING



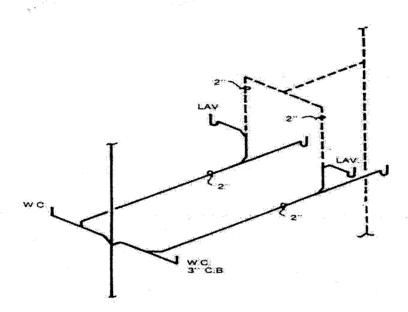
## SIZING OF CIRCUIT OR LOOP VENT-TYPICAL EXAMPLE



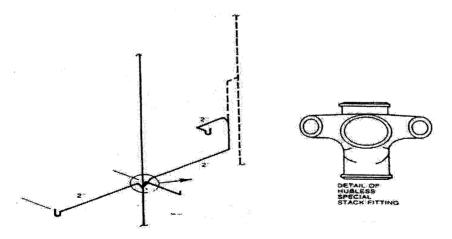
STACK VENTING—UPPER AND LOWER FLOORS—BACK-TO-BACK BATHROOM GROUPS AND KITCHENS—TYPICAL LAYOUT



AN EXAMPLE OF DUAL BRANCHES



TYPICAL EXAMPLE OF 45°CONNECTION



APPLICATION OF SPECIAL STACK FITTING — TYPICAL EXAMPLE